ELEMENTS OF THERAPEUTICS: OR, FIRST PRINCIPLES OF THE PRACTICE OF PHYSIC.

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Nihil remedium appellari debeat nisi quod ex curantis consilio aptatur morbo. SIMSON.

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Nemo unquam vitiis purus fuit, ego ne plurimis quidem. Non ideo, quod veritatem non amaverim, quaesiverim perpetuis, et in natura indaganda laboribus, et in scriptis utilium auctorum; sed quod Providentia divina, nullo certo ductu, vitam meam me siverit gubernare. HALLER.

ELEMENTS
OF
THERAPEUTICS.
PART SECOND.

CHAP. I. Of Emetics.

§ 1. *Of the Nature of Emetics.*

I.

UNDER the title of Emetics are to be conſidered thoſe medicines which, taken into the ſtomach in a ſound ſtate, are capable of exciting vomiting, independent of any action ariſing from the quantity of matter employed, and which, at the ſame time, can be ſo mana-

ged as to operate without endangering life.

II.

From the uſe of emetic medicines the following direct effects are produced.—They excite ſickneſs, nauſea, and their common attendants. They produce the action of vomiting itſelf. They occaſion ſudden and oppoſite changes in the circulation. They increaſe the ſecretion or the diſcharge of ſecreted matter from the various glands which prepare fluids to be depoſited in the alimentary canal.

III.

The changes induced in the ſyſtem, in conſequence of the primary effects of emetics are :—The evacuation of the con-

tents of the ſtomach, and, in ſome degree, of the upper part of the inteſtinal tube: Free circulation through the ſtomach, inteſtines, and glands whoſe ſecreted matters are acted upon: General agitation of the body: A commotion of the nervous ſyſtem: A particular affection of the ſurface of the body.

IV.

The different articles referred to the claſs of emetics, may be diſtributed into the following orders:

1. EMETICA IRRITANTIA. As examples of which may be mentioned, *Tartarum emeticum, Vitriolum album, Turpethum minerale.*

2. EMETICA EVACUANTIA.——*Ipecacuanha, Asarum, Scilla.*

3. EMETICA CALEFACIENTIA.——*Sinapi, Raphanus rusticanus.*

4. EMETICA NARCOTICA.——*Nicotiana, Digitalis.*

§ 2. *Of the Use of Emetics.*

V.

The indications which emetic medicines are capable of fulfilling, may be derived from the three following sources.

1. From their producing agitation of the body. Hence they may be employed,

a. To restore uniform circulation.

b. To promote diminiſhed lymphatic abſorption.

c. To remove obſtructions in the ſanguiferous ſyſtem.

2. From their producing evacuation by vomiting. Hence they may be uſed,

a. To diſcharge noxious matters taken in by the mouth.

b. To diſcharge morbid accumulations of ſecreted matters lodged in the ſtomach.

c. To evacuate ſerous accumulations.

3. From the affection of the nervous ſyſtem which they occaſion. Hence they may be employed,

a. To reſtore excitement to the nervous ſyſtem in general.

b. And to obviate inordinate affections of the nervous energy.

Theſe indications may be illuſtrated and confirmed from practical obſervations concerning the uſe of emetics, when employed in caſes of Fever, Dyſentery, *Phthiſis Pulmonalis*, Jaundice, Apoplexy, Dropſy, and Poiſons.

VI.

The principal circumſtances reſpecting the choice of orders in the claſs of emetics, may be deduced from the following obſervations concerning each.

1. EMETICA IRRITANTIA. The individuals referred to this order, from their nature, are adapted to all the ſources of indication for which emetics may be employ-

ed.—From the degree of effect they produce, they are fitted for the moſt conſiderable changes; and are particularly preferable to other orders, where the greateſt agitation or moſt complete evacuation is required.—The conſtitutions to which they are principally adapted, are the Vigorous; the Melancholic; And thoſe with difficulty affected by emetics.

2. EMETICA EVACUANTIA. The individuals referred to this order, as well as the preceeding, from their nature, are adapted to every ſource of indication. From the degree of effect they produce, they are preferable where leſs conſiderable changes are wanted, and where it is more particularly neceſſary to regulate the preciſe degree of change.—They may be adapted to any habit; but

the conſtitutions in which they are chiefly preferable to others, are the plethoric and infirm.

3. EMETICA CALEFACIENTIA. The individuals reduced to this order, from their nature, are not extenſively applicable as emetics. They are chiefly employed when it is intended an emetic effect ſhould be combined with a topical ſtimulus to the ſtomach.——From the degree of effect they produce, they are fitted for ſlight changes only.—The conſtitutions to which they are principally adapted, are the delicate and debilitated.

4. EMETICA NARCOTICA. Theſe, as having been but little employed, are ſtill in a great meaſure unknown. They would

ſeem applicable where a peculiar affection of the nervous ſyſtem is wanted.—From the degree of effect they produce, they are fitted for the higheſt changes: But they can never with prudence be employed in ſuch doſes as to produce any conſiderable change.—They are admiſſible in thoſe conſtitutions only, where there is no high degree of irritability in the nervous ſyſtem.

VII.

The cautions to be obſerved in the employment of emetics, as derived from their nature, chiefly reſpect, The agitation of the body which they occaſion; The increaſed celerity of the pulſe attending their operation.—The conditions of the ſyſtem which chiefly require attention in their employment, are, Infancy; Old Age;

Pregnancy; Delicacy of Habit; and Plethora.——The circumſtances chiefly to be regarded with reſpect to the regimen neceſſary for this claſs, are, The ſtate of the ſtomach when the emetic is exhibited; The means of facilitating the operation; The time of exhibiting the medicine; The temperature in which the patient is kept, after its operation is finiſhed.

VIII.

The different individuals belonging to the claſs of emetics are chiefly contra-indicated by the preſence of the following morbid ſtates: A rupture or relaxation of containing membranes. Topical inflammation of the internal viſcera. A high degree of morbid debility in theſe. Fixed obſtructions to the circulation.

CHAP. II.

OF CATHARTICS.

§ 1. *Of the Nature of Cathartics.*

IX.

BY cathartics, are to be underſtood thoſe medicines, which, taken internally, increaſe the number of ſtools, without endangering life, and which, at the ſame time, produce this effect independent of any action which may be attributed to the quantity of matter employed.

X.

From the uſe of cathartics, the following direct effects are produced: They ſtimu-

late the alimentary canal. They increaſe the periſtaltic motion of the inteſtines. They promote the ſecretion of thoſe fluids which, for the purpoſes of the oeconomy, are requiſite in the inteſtinal canal. They produce more frequent and looſer ſtools.

XI.

The changes induced in the ſyſtem from the primary effects of cathartics, are: The evacuation of the contents of the inteſtines: A diminution of the quantity of circulating fluids, and, in a particular manner, of the ſeroſity: A change in the balance of circulation: A diminution of perſpiration: Higher excitement of the nervous energy in the ſyſtem in general, but more eſpecially in the inteſtinal canal.

XII.

The different articles referred to the clafs of cathartics may be divided into the following orders:

1. CATHARTICA STIMULANTIA, as examples of which may be mentioned, *Jalappa, Aloe, Colocynthis.*

2. CATHARTICA REFRIGERANTIA.—*Sal Glauberi, Sal Polychreſtus, Cremor Tartari.*

3. CATHARTICA ASTRINGENTIA.—*Rhabarbarum, Roſa Damaſcena.*

4. CATHARTICA EMOLLIENTIA.——*Manna, Malva, Oleum Ricini.*

CATHARTICA NARCOTICA.—*Nicotiana, Hyoſcyamus, Digitalis.*

§ 2. *Of the Uſe of Cathartics.*

XIII.

The indications which cathartic medicines are capable of fulfilling, may be derived from the three following ſources:

1. From their producing evacuation. Hence they may be employed,

a. To obviate morbid retention of the contents of the inteſtines.

b. To diminiſh the quantity of circulating fluids when too great for the then ſtate of the ſyſtem.

c. To evacuate morbid accumulations of ſerum.

2. From their altering the balance of circulation. Hence they may be employed,

a. To promote free circulation through the inteſtines, in thoſe caſes where it is morbidly impeded:

b. To diminiſh the impetus of the blood againſt parts morbidly affected.

3. From the affection of the nervous ſyſtem which they occaſion. Hence they may be employed,

a. To remove torpor in the muſcular fibres of the inteſtines:

b. To reſtrain inordinate motions in theſe muſcular fibres.

Theſe indications may be illuſtrated and confirmed, from conſidering the effects of

this claſs of medicines as employed in caſes of Dyſentery, Small Pox, Dropſy, Obſtructed Menſes, and Diarrhœa.

XIV.

The principal circumſtances regulating the choice of orders in the claſs of cathartics may be deduced from the following obſervations concerning each :

CATHARTICA STIMULANTIA. The individuals referred to this order, are, from their nature, adapted to fulfil indications reducible to every ſource: As evacuants, they are particularly fitted to diſcharge accumulations of ſerum ; and they may be uſed in obſtinate caſes, to obviate morbid retention of the contents of the inteſtines: As altering determination, they may be employed to promote free cir-

culation through the inteſtines, where morbidly impeded: As affecting the nervous ſyſtem, they may, with advantage, be uſed to remove torpor in the muſcular fibres of the inteſtines.——From the degree of change they produce, they are preferable to others, where the higheſt purgative effects are wanted.——The conſtitutions to which they are chiefly adapted are, the indolent; the phlegmatic; and thoſe with difficulty affected by cathartics.

CATHARTICA REFRIGERANTIA. The individuals referred to this order, are, from their nature, more particularly adapted to the two firſt ſources of indication. As evacuants, they may be ſucceſsfully employed to diminiſh a plethoric ſtate in the ſyſtem; and

may be uſed, at leaſt, as a temporary remedy to obviate retention of the contents of the inteſtines. As changing determination, they are well fitted to diminiſh impulſe againſt parts morbidly affected. —From the degree of effect they produce, they may be employed, where conſiderable changes are required; but, by regulating the doſe, they may be ſuited to thoſe caſes in which the ſlighteſt changes will be ſufficient. The conſtitutions in which they are chiefly preferable to other catharties, are, plethoric habits; and thoſe with an inflammatory diatheſis.

CATHARTICA EMOLLIENTIA. The individuals referred to this order, are, from their nature, fitted to act as evacuants only, and their chief uſe, in this way, is to diſcharge the contents of the inteſtines.—— From the degree of effect they produce,

they can be uſed only for inconſiderable changes.——The conſtitutions to which they are particularly adapted, are the aged; and thoſe occaſionally coſtive.

CATHARTICA ADSTRINGENTIA. The individuals referred to this order, are, from their nature, capable of anſwering many purpoſes for which cathartics are employed; but are ſeldom preferable to other orders, unleſs where it is neceſſary to conjoin an aſtringent with a purgative effect.——From the degree of effect they produce, they may be employed, where a very conſiderable change is wanted; at the ſame time, they are capable of being adapted to ſlight changes.——The conſtitutions in which they are particularly proper are, the lax; the irritable; and thoſe habitually liable to looſeneſs.

CATHARTICA NARCOTICA. The individuals referred to this order, from their nature, would ſeem chiefly applicable for affecting the nervous ſyſtem, and may perhaps be uſed with advantage for reſtraining inordinate motions of the inteſtines.——From the degree of effect they produce, they are fitted for the higheſt changes.——The only conſtitutions in which they can be employed, are thoſe which are able to endure a ſtrong purgative operation.

XV.

The cautions to be obſerved in the employment of cathartics, as derived from their nature, chiefly reſpect, The degree of evacuation they produce from the circulating fluids; And the topical irritation they occaſion to the inteſtines themſelves.——The conditions of

the ſyſtem which chiefly require attention in their employment, are Childhood; Female habits; Hyſterical conſtitutions; High degrees both of irritability and torpor; Remarkable delicacy of the ſtomach; And peculiar antipathies.——The circumſtances chiefly to be regarded with reſpect to the regimen neceſſary for this claſs, are: The mode of exhibiting the cathartic: The time at which it is given: The temperature in which the patient is kept during its operation: The diet employed: And the degree of exerciſe he uſes.

XVI.

The morbid conditions, contra-indicating the uſe of cathartic medicines, apply only to particular orders. The ſtimulant, refrigerant, and aſtringent, are contra-indicated by general inanition of the

fyſtem; the ſtimulant, by a high degree of irritability in the inteſtines, and by morbidly accelerated circulation; the refrigerant, by the circulation uncommonly ſlow and languid; the aſtringent, by habitual coſtiveneſs; and, the emollient, by uncommon relaxation of the inteſtines.

CHAP. III.

OF DIAPHORETICS.

§ 1. *Of the Nature of Diaphoretics.*

XVII.

BY diaphoretics, are to be underſtood thoſe medicines, which, from being taken internally, encreaſe the diſcharge by the ſkin, without producing this effect either in conſequence of violent agitation or acute pain.

XVIII.

From the uſe of diaphoretic medicines, the following direct effects are produced:

They accelerate the motion of the blood. They produce free circulation through the veſſels on the ſurface. They excite a diſcharge of ſweat.

XIX.

The changes induced in the ſyſtem, from the more immediate effects of diaphoretics, are: A change in the balance of the circulation: A diminution of the quantity of circulating fluids: And a diminution more particularly of the ſeroſity.

XX.

The different articles referred to the claſs of diaphoretics may be diſtributed into the following orders.

1. DIAPHORETICA CALEFACIENTIA; as examples of which may be mentioned, *Serpentaria*, *Contrayerva*, *Guaiacum*.

2. DIAPHORETICA PUNGENTIA.—— *Spiritus Cornu Cervi, Oleum essentiale Lavendulae.*

3. DIAPHORETICA STIMULANTIA.—— *Antimonium, Hydrargyrus.*

4. DIAPHORETICA ANTISPASMODICA. *Opium, Moschus, Camphora.*

5. DIAPHORETICA DILUENTIA.—— *Aqua, Serum lactis.*

§ 2. *Of the Use of Diaphoretics.*

XXI.

The indications which diaphoretics are capable of fulfilling, may be derived from the two following sources.

1. From their changing the mode of circulation: Hence they may be employed,

a. To obviate morbid determination taking place to the internal viſcera.

b. To remove various cauſes obſtructing or impeding the natural ſtate of circulation on the ſurface.

c. To reſtore the natural diſcharge from the body, which ſhould take place by the ſurface, in thoſe caſes where it is morbidly diminiſhed.

2. From their producing evacuation: Hence they may be employed,

a. To diminiſh the quantity of circulating fluids, where it is greater than the ſtate of the ſyſtem at the time can admit of.

b. To reſtore diminiſhed lymphatic abſorption:

c. And to diſcharge morbid accumulations of ſerum.

Theſe indications may be illuſtrated and confirmed, from practical obſervations concerning the effects of diaphoretic medicines in Fever, Dyſentery, Rheumatiſm, Dropſy, and Herpes.

XXII.

The principal circumſtances regulating the choice of orders in the claſs of diaphoretics, may be deduced from the following obſervations concerning each.

1. DIAPHORETICA CALEFACIENTIA. The individuals referred to this order, are, from their nature, chiefly adapted for the indications to be fulfilled by diaphoretics from their action as evacuants; they are

particularly fitted to reſtore diminiſhed lymphatic abſorption; and to diſcharge morbid accumulations of ſerum: They are leſs applicable for thoſe indications to be anſwered by diaphoretics, as changing the balance of circulation; but they may often, with propriety, be employed to reſtore proper circulation on the ſurface. From the degree of effect they are capable of producing, they may be employed in thoſe caſes where very conſiderable changes are requiſite: By proper management, they may likewiſe be adapted to ſlight changes. —The condition of the ſyſtem, in which they are chiefly preferable to others, is, where the circulation is ſlow and languid.

2. DIAPHORETICA PUNGENTIA. The individuals referred to this order of dia-

phoretics, are, from their nature, chiefly applicable for producing the ſame changes as were mentioned of the preceding order. From the degree of effect they produce, they are preferable to other orders, where a conſiderable change is ſuddenly wanted.—The conſtitutions to which they are principally adapted, are: The aged: Thoſe in whoſe ſyſtem there is little ſenſibility: Thoſe who are difficultly affected by other diaphoretics: And thoſe whoſe ſtomachs will not bear large doſes of medicines.

3. DIAPHORETICA STIMULANTIA. The individuals referred to this order, are, from their nature, more univerſally fitted for all the purpoſes to be anſwered by diaphoretics, than either of the preceding orders.—From the degree of effect they produce, they are chiefly applicable where the

higheſt and moſt durable changes are wanted.—The conſtitutions to which they are beſt fitted, are the vigorous and plethoric.

4. DIAPHORETICA ANTISPASMODICA. The individuals referred to this order are, from their nature, chiefly fitted for theſe purpoſes to be anſwered by diaphoretics, as changing the mode of circulation; but frequently they cannot, with advantage, be employed to remove cauſes impeding the flow of blood through the veſſels on the ſurface: Taken by themſelves, they are but little adapted for fulfilling theſe indications to be anſwered by diaphoretics, from their action as evacuants; but, when conjoined with others, they may frequently be employed with great advantage in this way.—From the degree of effect they

produce, by themſelves, they are fitted for ſlight changes only; in combination, for the higheſt changes.—The condition of the ſyſtem in which they are chiefly preferable to others, is, when, although the momentum of the blood be increaſed, no diaphoreſis takes place.

5. DIAPHORETICA DILUENTIA. The individuals referred to this order, are, from their nature, but little adapted for changing the mode of circulation, and are by no means calculated for producing evacuation; they ſeem to be chiefly uſeful for promoting the action of other diaphoretics.—From the degree of effect they are capable of producing, they can be employed only where ſlight changes are wanted.—The conſtitutions in which they are chiefly preferable to others, are, thoſe in which a prediſpoſition to dia-

phoreſis is wanted; and in which no diaphoreſis takes place, although there be evident cauſes to induce it.

XXIII.

The cautions to be obſerved in the employment of diaphoretic medicines, as derived from their nature, chiefly reſpect: The determination they produce to the ſurface: The acceleration of the motion of the blood, which many of them occaſion: The debility which, in conſequence of the diſcharge, is produced in the ſyſtem: And the effects ſometimes produced on the veſſels of the ſurface themſelves, by the free paſſage of the blood through them.—The conditions of the ſyſtem which chiefly require attention in their employment, are: The period of infancy: Lax and debilitated habits: Conſtitutions liable to coſtiveneſs:

And thoſe not eaſily affected by diaphoretic medicines.—The circumſtances chiefly to be attended to in the regimen neceſſary for this claſs, reſpect: The uſe of liquids: The temperature in which the patient is kept during the operation of the medicine, and after it is finiſhed: And various means of promoting the operation of the claſs, adapted to particular caſes.

XXIV.

Diaphoretics are chiefly contra-indicated by the following morbid ſtates: A morbid increaſe in the determination of blood to the ſurface: Uncommon relaxation of the ſyſtem in general: A high degree of inanition: And a morbid diminution of the impulſe of the blood on the baſis of the brain.

CHAP. IV.

Of Epispastics.

§ 1. *Of the Nature of Epiſpaſtics.*

XXV.

BY epiſpaſtics are to be underſtood thoſe ſubſtances, which increaſe the action of the veſſels in thoſe parts of the ſurface of the body to which they are applied, in ſuch a manner as to produce an afflux of fluids there.

XXVI.

From the uſe of epiſpaſtic medicines, the following direct effects are produced.

They excite pain. They increaſe the quantity of fluids circulating through the part to which they are applied: They produce a diſcharge of liquid in the form of ſeroſity. They produce a diſcharge of pus.

XXVII.

The changes induced in the ſyſtem from the primary effects of epiſpaſtics, are: Attention to the ſenſation of pain excited by the application of the epiſpaſtic: An increaſe of excitement in the nervous energy through the ſyſtem in general: An uncommon determination of the blood to the part particularly acted upon: A diminution of quantity of blood paſſing thro' the blood-veſſels in the neighbourhood of thoſe in which the flow of blood is increaſed: A permanent change in the mode of

circulation: A diminution of the quantity of circulating fluids: And a particular diminution of the ſerous part of the blood.

XXVIII.

The different articles referred to the claſs of epiſpaſtics, may be diſtributed into the three following orders:

1. EPISPASTICA RUBEFACIENTIA: As examples of which may be mentioned, *Sinapi*, *Alkali Volatile*.

2. EPISPASTICA VESICANTIA.—*Cantharides*.

3. EPISPASTICA SUPPURANTIA.—*Fonticuli*, *Setacea*.

§ 2. *Of the Use of Epispastics.*

XXIX.

The indications which epispastics are capable of fulfilling, may be derived from the three following sources:

1. From their acting on the nervous energy. Hence they may be employed,

a. To diminish violent pain.

b. To take off the effects of uncommon sensibility.

c. To remove torpor.

2. From their altering the balance of circulation. Hence they may be employed,

a. To diminish the impetus of the blood against any part morbidly affected.

b. To diminiſh a morbid increaſe of action in veſſels in the neighbourhood of thoſe to which they are applied.

3. From their producing evacuation. Hence they may be employed,

a. To diminiſh the quantity of circulating fluids, when too great for the ſtate of the ſyſtem at the time.

b. To evacuate morbid accumulations of ſerum.

Theſe indications may be illuſtrated and confirmed from practical obſervations concerning the uſe of epiſpaſtics in caſes of Toothach, Haemorrhagy, Apoplexy, Ophthalmia, Hepatitis, and Hydrocephalus.

XXX.

The principal circumſtances reſpecting the choice of orders in the claſs of epiſ-

paſtics, may be deduced from the following obſervations concerning each.

1. EPISPASTICA RUBEFACIENTIA. The individuals referred to this order, from their nature, are not extenſively applicable to anſwer the purpoſes for which the claſs may be employed. They are fitted to fulfill ſome indications from an action on the nervous ſyſtem. They are preferable to other epiſpaſtics for the removal of torpor when ſuddenly required. They may alſo ſometimes be employed to fulfill indications as changing the mode of circulation. But they are rarely, with this intention, preferable to the other orders.—From the degree of effect they produce, they are applicable chiefly to thoſe caſes where ſlight and tranſitory changes are wanted.—The conſtitutions to which they are principally adapted are dry,

ſpare habits; thoſe which would be hurt by any degree of evacuation; and thoſe much debilitated by long continued diſeaſes.

2. EPISPASTICA VESICANTIA. The individuals belonging to this order are, from their nature, adapted for all the indications to be anſwered by the claſs: They are particularly preferable to all others where evacuation is ſuddenly wanted.—From the degree of effect they produce, they may be employed where the higheſt changes are requiſite: They will ſcarce admit of being adapted to thoſe caſes where very ſlight changes only are proper.—The conſtitutions to which this order of epiſpaſtics are chiefly adapted, are the ſerous for phlegmatic, thoſe in the prime of life; and thoſe who are affected with acute diſeaſes.

EPISPASTICA SUPPURANTIA. The individuals referred to this order are, from their nature, adapted to fulfill thoſe indications which may be anſwered by a change in the determination of the blood: They are frequently of remarkable ſervice for diminiſhing the impetus of the blood in parts morbidly affected. They may alſo be uſed with advantage to diminiſh a morbid increaſe of action in neighbouring veſſels, if a conſiderable effect be not ſuddenly required. They may be uſed likewiſe for ſome purpoſes to be anſwered by evacuation: They are not adapted to diminiſh the quantity of circulating fluids; but they may be of ſervice for evacuating ſerous accumulations; they are chiefly of uſe for this purpoſe, when theſe are deep ſeated, or in their nature ſuch, that they cannot be

eaſily acted upon.—The conſtitutions to which they are adapted in preference to other epiſpaſtics are, the aged; the irritable; and thoſe labouring under chronic complaints.

XXXI.

The cautions to be obſerved in the employment of epiſpaſtics, as derived from their nature, chiefly reſpect: The pain which is occaſioned by their action, eſpecially when that has no tendency to remove the complaints againſt which they are uſed: The inflammation they excite in the part to which they are applied: And the ſtrangury which is a frequent attendant of their operation.—The conditions of the ſyſtem which chiefly require attention in their employment are, the female ſex; lax and phlegmatic habits.——The circumſtances

chiefly to be obſerved with regard to the regimen neceſſary during the claſs, reſpect: The accommodation of the diet and temperature to the diſeaſe of the patient: The uſe of demulcents and diluents: The length of the application of the order of veſicantia: The treatment of the part after they are removed: And the continuance of epiſpaſtic applications when the order of ſuppurantia are employed.

XXXII.

The different individuals belonging to this claſs of medicines, are chiefly contra-indicated by the preſence of the following morbid ſtates: A high degree of irritability in the ſyſtem in general: Morbid ſpiſſitude of the blood: Or a general inanition of the fluids.

CHAP. V.

Of Diuretics.

§ 1. *Of the Nature of Diuretics.*

XXXIII.

BY diuretics, are to be underſtood thoſe medicines, which, from being taken internally, augment the flow of urine from the kidneys.

XXXIV.

From the uſe of diuretic medicines the following direct effects are produced: They promote the ſecretion of urine from

the maſs of circulating fluids: And they promote its excretion from the bladder.

XXXV.

The changes induced in the ſyſtem from theſe direct effects are: A change in the balance of circulation: A diminution of the quantity of circulating fluids; but more eſpecially of the ſeroſity and of the ſaline parts of the blood: An increaſe of abſorption by the lymphatic veſſels: A diminution of the quantity of matter diſcharged by perſpiration: And an uncommon flow of fluid through the urinary paſſages.

XXXVI.

The different articles referred to the claſs of diuretics may be diſtributed into the following orders:

1. DIURETICA STIMULANTIA; as examples of which may be mentioned *Apium*, *Geniſta*, *Scilla*, *Colchicum*, *Cantharides*.

2. DIURETICA REFRIGERANTIA.—*Acetoſa*, *Berberis*, *Acetum*, *Sal Diureticus*, *Cremor Tartari*.

3. DIURETICA DILUENTIA.——*Aqua*, *Aquae acidulae*, *Serum lactis*.

§ 2. *Of the Uſe of Diuretics.*

XXXVII.

The indications which diuretic medicines are capable of fulfilling may be derived from the three following ſources;

1. From their producing evacuation. Hence they may be employed,

a. To remove ſuperabundant ſeroſity from the blood.

b. To evacuate morbid accumulations of ſerum.

c. To remove morbid acrimony from the blood.

d. To diminiſh the quantity of circulating fluids, when too great for the ſtate of the ſyſtem at the time.

2. From their altering the mode of circulation. Hence they may be employed,

a. To reſtore the natural ſecretion of urine when morbidly diminiſhed.

b. To diminiſh other ſecretions when morbidly augmented.

3. From their augmenting the flow of liquid through the urinary paſſages. Hence they may be employed,

a. To remove obſtructions in theſe paſſages,

b. To waſh out acrimony from them.

Theſe indications may be illuſtrated and confirmed from conſidering the effects of this claſs of medicines, as employed in caſes of Aſcites, Icterus, and Nephritis.

XXXVIII.

The principal circumſtances regulating the choice of orders in the claſs of diuretics, may be deduced from the following obſervations concerning each.

Diuretica Stimulantia. The individuals referred to this order are, from their nature, adapted to ſome of thoſe purpoſes to be anſwered by diuretics, from their action as evacuants: They are eſpecially

ſuited to remove ſuperabundant ſeroſity from the blood; and are particularly proper to evacuate ſerous accumulations: They are alſo fitted to produce changes in determination; but are ſeldom preferable to other orders for anſwering the indications referred to that ſource. They are but little adapted to anſwer any good purpoſe from increaſing the flow of liquid through the urinary paſſages.—From the degree of effect they are capable of producing, they are preferable to the other orders in thoſe caſes where the higheſt changes are required.—The conſtitutions to which they are principally adapted are, the Aged; the Lax; the Phlegmatic; And thoſe with highly diminiſhed ſenſibility.

2. DIURETICA REFRIGERANTIA. The individuals referred to this order, from

their nature, are more univerſally applicable than the preceeding, for anſwering thoſe indications which diuretics are capable of fulfilling by acting as evacuants: They are preferable to others in thoſe caſes in which evacuation is quickly wanted: They are well adapted, likewiſe, for the purpoſes of changing determination, and ſeem particularly calculated for diminiſhing different morbid ſecretions.——From the degree of effect they are capable of producing, they may be adapted both to conſiderable and ſlight changes.—The conſtitutions in which they are chiefly preferable to others, are, the Young; the Sanguine; and thoſe of remarkable ſenſibility.

3. DIURETICA DILUENTIA. The individuals referred to this order, are, from their

nature, ill adapted for producing evacuation. They are often, however, of particular ſervice in this way, as tending to begin or promote the operation of other diuretics; and they are preferable to the other orders for the removal of acrimony from the blood. They may often be employed with advantage to reſtore diminiſhed ſecretion of urine; and they are better fitted than the other orders for the removal of obſtructions in the urinary paſſages.—From the degree of effect they are capable of producing, they are fitted only for inconſiderable changes.—The conſtitutions to which they are beſt adapted, are thoſe in which the ſeroſity appears to be deficient in the ſyſtem; and in which there is a high degree of inanition.

XXXIX.

The cautions to be obſerved in the employment of diuretic medicines, as derived from their nature, chiefly reſpect: The evacuation they occaſion: The changes which they induce on the ſtate of the kidney itſelf: And the flow of fluid which they occaſion through the urinary paſſages.—The conditions of the ſyſtem which chiefly require attention in their employment, are: The ſtate of the diſcharge by urine previous to their uſe: And the peculiarities in conſtitution, by which their operation is particularly affected.—The circumſtances chiefly to be regarded in the regimen neceſſary for this claſs, reſpect: The form of exhibiting the medicines: The manner of promoting its operation: The adapting theſe to the nature of the diſeaſe: The temperature of the bo-

dy in general, and of the loins in particular: The diet: The temperature of liquids drunk: And the cauſes determining to the ſurface.

XL.

The different individuals belonging to this claſs of medicines are chiefly contra-indicated by the preſence of the following morbid ſtates: A high degree of morbid ſenſibility in the kidney: A morbid increaſe in the ſecretion of urine: And fixed obſtructions in the urinary paſſages. The uſe of the *Diuretica Stimulantia* and *Refrigerantia* are further contra-indicated by a deficiency of ſeroſity in the body; and of the *Diluentia*, by a redundancy of ſeroſity.

CHAP. VI.

Of Expectorants.

§ 1. *Of the Nature of Expectorants.*

XLI.

UNDER the title of Expectorants are to be considered, thoſe medicines which can with ſafety be employed to increaſe the diſcharge of mucus from the lungs.

XLII.

From the employment of expectorant medicines, the following direct effects are produced. They ſtimulate the lungs them-

ſelves. They augment the ſecretion taking place by the mucous glands of the lungs. They increaſe the excretion of mucus from the lungs.

XLIII.

The changes induced in the ſyſtem, from the primary effects of expectorants, are: An alteration on the ſtate of the mucus excreted to a more thin and fluid conſiſtence: An increaſe of the ſenſibility of the lungs: Free circulation thro' the blood-veſſels of the ſecreting glands: And the evacuation of thoſe cavities in the the lungs in which mucus is depoſited.

XLIV.

The different articles referred to the claſs of expectorants, may be divided into the following orders:

1. EXPECTORANTIA NAUSEOSA; as examples of which may be mentioned, *Scilla, Ammoniacum, Allium.*

2. EXPECTORANTIA STIMULANTIA.—*Hyssopus, Marrubium, Hedera terrestris.*

3. EXPECTORANTIA ANTISPASMODICA. *Vesicatoria, Pediluvium, Vapores Aquosae.*

4. EXPECTORANTIA IRRITANTIA.—*Nicotianae fumus, Vapores acidi.*

§ 2. *Of the Use of Expectorants.*

XLV.

The indications which expectorant medicines are capable of fulfilling, may be derived from the three following sources:

1. From their affecting the ſecretion of mucus. Hence they may be uſed,

a. To promote the ſecretion of mucus by the lungs, when morbidly diminiſhed there.

b. To render the mucus of the lungs thinner, when morbidly thick and viſcid.

2. From their affecting the excretion of mucus. Hence they may be employed,

a. To evacuate morbid accumulations of mucus in the lungs.

b. To ſupply irritation to the lungs when morbidly deficient.

3. From their effecting the ſtate of the lungs themſelves. Hence they may be employed,

a. To remove morbid inſenſibility in the lungs.

b. To promote free circulation through the lungs when morbidly impeded there.

Theſe indications may be illuſtrated and confirmed from practical obſervations concerning the effects of expectorants when employed in caſes of Catarrh and Peripneumony.

XLVI.

The principal circumſtances reſpecting the choice of orders in the claſs of expectorants, may be deduced from the following obſervations concerning each.

1. EXPECTORANTIA NAUSEOSA. The individuals referred to this order, from their nature, are well adapted for anſwer

ing all the purpoſes for which expectorants can be employed. They are preferable to the other expectorants to render the mucus thinner, when morbidly thick and viſcid.—From the degree of effect they produce, they are beſt fitted for thoſe caſes in which the moſt conſiderable changes are gradually required.—The conſtitutions to which they are principally adapted, are, the Aged: And the phlegmatic.

2. EXPECTORANTIA STIMULANTIA.—The individuals referred to this order, from their nature, are applicable for many of thoſe purpoſes for which expectorants are employed. But they are chiefly uſeful as affecting the ſecretion of mucus; and are principally employed to promote it when morbidly diminiſhed.—From the degree of effect they produce, they can only be em-

ployed where inconſiderable changes are wanted.—The conſtitutions to which they are chiefly adapted, are, the Young: The Irritable: And thoſe eaſily affected by expectorants.

3. EXPECTORANTIA ANTISPASMODICA. The individuals referred to this order, from their nature, are chiefly fitted for promoting the ſecretion of mucus. They are preferable to other expectorants for this purpoſe in thoſe caſes where the diminution of ſecretion ariſes from a ſtricture on the veſſels of the lungs.—From the degree of effect they produce, they may be employed for obtaining conſiderable, but tranſitory changes only. They are preferable to other expectorants in caſes where theſe changes are ſuddenly wanted.—The conſtitutions to which they are beſt adapted,

are, the Plethoric; the Irritable; and thoſe liable to ſpaſmodic affections.

4. EXPECTORANTIA IRRITANTIA. The individuals referred to this order, from their nature, are fitted to act upon the ſecretion of mucus from the lungs. But they are chiefly uſeful for affecting its exeretion. They may alſo be ſometimes employed with advantage to promote free circulation through the lungs when it is morbidly impeded there.—From the degree of effect they produce, they can, as well as the former order, be employed for conſiderable but temporary changes only.—The conſtitutions to which they are chiefly adapted, are, thoſe paſt the period of youth: And thoſe in whom there are evident marks of torpor, either in the ſyſtem in general, or in the lungs in particular.

XLVII.

The cautions to be obſerved in the employment of expectorants, as derived from their nature, chiefly reſpect: Their operations as exciting nauſea: Their power of ſtimulating the ſyſtem in general from acting on the ſtomach: And their influence as irritating the lungs themſelves.—The conditions of the ſyſtem which chiefly require attention in their employment are: The degree of irritability with which the lungs are endowed: And the youth of the patient.—The circumſtances chiefly to be attended to in the regimen neceſſary for this claſs, are: The ſtate of the ſtomach: The employment of diet fitted to conſpire with the effect of the medicine: The free uſe of exerciſe: And the ſtate of the atmoſphere in which the patient breathes.

XLVIII.

The different individuals belonging to the claſs of expectorants, are chiefly contra-indicated by the preſence of the following morbid ſtates: A high degree of increaſed ſenſibility in the lungs: And an uncommonly quick excretion of mucus from the lungs.

CHAP. VII.

Of Errhines.

§ 1. *Of the Nature of Errhines.*

XLIX.

BY errhines are to be underſtood thoſe medicines, which, when topically applied to the internal membrane of the noſe, excite ſneezing, and increaſe ſecretion, independent of any mechanical irritation.

L.

From the employment of errhines, the following direct effects are produced. They

occaſion a ſenſe of titillation in the noſe. They exite the action of ſneezing. They occaſion the expulſion of ſecreted mucus from the different receptacles into which it is depoſited. They augment the ſecretion of mucus from the glands in the cavity of the noſe ſerving that purpoſe.

LI.

The changes induced in the ſyſtem, from the primary effects of errhines, are: Violent agitation of the body: Commotion of the nervous ſyſtem: Sudden changes in the circulation: A diminution of the quantity of circulating fluids: More free circulation through the mucous glands, on which the errhine acts: A change in the balance of circulation ſubſiſting betwixt theſe and the neighbouring parts.

LII.

The different articles referred to the class of errhines, may be distributed into the following orders:

1. ERRHINA STERNUTATORIA; as examples of which may be mentioned, *Nicotiana*, *Helleborus*, *Euphorbium*.

2. ERRHINA EVACUANTIA.——*Asarum*, *Beta*, *Betonica*.

§ 2. *Of the Use of Errhines.*

LIII.

The indications which errhine medicines are capable of fulfilling, may be derived from the two following sources:

1. From their producing agitation of

the ſyſtem in general. Hence they may be employed,

a. To diſcharge morbid accumulations of mucus in the cavities ſurrounding the noſe.

b. To remove a ſtate of torpor in the nervous ſyſtem.

c. To obviate nervous affections of the convulſive or ſpaſmodic kind.

2. From their producing determination to the noſe. Hence they may be employed,

a. To promote the ſecretion of mucus in the noſe when morbidly diminiſhed.

b. To occaſion derivation from parts morbidly affected in the neighbourhood of the noſe.

Theſe indications may be illuſtrated and confirmed from practical obſervations concerning the effects of this claſs of medicines

when employed in caſes of Apoplexy, Palſy, Headach, and Ophthalmia.

LIV.

The principal circumſtances regulating the choice of orders in the claſs of errhines, may be deduced from the following obſervations concerning each.

1. ERRHINA STERNUTATORIA. The individuals belonging to this order, from their nature, are beſt adapted for anſwering the general purpoſes of agitation. They are the only errhines employed to obviate nervous affections of the convulſive or ſpaſmodic kind.——From the degree of effect they produce, they are applicable in thoſe caſes where the greateſt changes are wanted, and where theſe are required moſt ſuddenly.———The

conſtitutions in which they are chiefly to be employed, are, The vigorous, provided they be not plethoric: The torpid: And thoſe to whom any degree of evacuation would be hurtful.

2. ERRHINA EVACUANTIA. The individuals referred to this order, from their nature, are beſt adapted for thoſe indications which may be fulfilled by producing determination to the noſe. And are alone uſed to occaſion derivation from parts morbidly affected in the neighbourhood of the noſe.—From the degree of effect they produce, they are fitted for thoſe caſes only in which ſlight agitation is requiſite; but are adapted to produce the moſt conſiderable evacuation.—The conſtitutions of the body in which they are chiefly preferable, are the phlegmatic; and infirm.

LV.

The cautions to be obſerved in the employment of errhines, as derived from their nature, reſpect chiefly: The agitation they produce in the ſyſtem in general: And the change they occaſion in determination, whether as producing a greater flow to the noſe, or derivation from other parts.—The conditions of the ſyſtem chiefly requiring attention in the employment, are: Infancy: Old Age: Irritable and Haemorrhagic habits: Thoſe which are morbidly torpid: And thoſe formerly accuſtomed to the frequent uſe of the ſame ſtimulus.—The circumſtances to be attended to in the regimen neceſſary, reſpect: The means of obviating inflammation when excited: And the avoiding ſudden expoſure to cold air.

LVI.

The different individuals belonging to the class of errhines, are chiefly contra-indicated by the presence of the following morbid states: A high degree of plethora: Morbid debility of the viscera: Uncommon sensibility of the nose: Preternatural determination to the nose: And ulceration of the nose or of neighbouring parts.

CHAP. VIII.

Of Sialagogues.

§1. *Of the Nature of Sialagogues.*

LVII.

BY ſialagogues are to be underſtood thoſe medicines which excite an uncommon flow of ſaliva, provided they produce this effect without its ariſing from any diſagreeable ſenſation which they may occaſion.

LVIII.

From the employment of ſialagogues, the following direct effects are produced:

They ſtimulate the ſalivary glands, or their excretories. They increaſe the action of the veſſels ſecreting ſaliva. They accelerate the circulation through the ſalivary glands, and through the blood-veſſels in the neighbourhood of theſe. They produce a praeternatural diſcharge of ſaliva, both in point of quantity and conſiſtence.

LIX.

The changes induced in the ſyſtem, from the primary effects of ſialagogues, are: A change in the diſtribution of the fluids circulating through theſe veſſels to which the action of the ſialagogue extends, and thro' the veſſels in the neighbourhood of theſe: A diminution of the quantity of circulating fluids in general: And a change in the ſtate

of the remaining mafs, independent of the diminution of quantity.

LX.

The different articles referred to the clafs of fialagogues, may be diftributed into the following orders:

1. SIALAGOGA TOPICA: As examples of which, may be mentioned *Scilla*, *Nicotiana*, *Piper*, *Angelica*.

2. SIALAGOGA INTERNA.——*Mercurii praeparationes*.

§ 2. *The Use of Sialagogues.*

LXI.

The indications of cure which sialagogues are capable of fulfilling, may be derived from the two following sources:

1. From their effects, as altering the balance of circulation. Hence they may be employed:

a. To diminish the impetus of the blood against parts morbidly affected in the neighbourhood of the salivary glands.

b. To diminish the action of the vessels when morbidly increased in these neighbouring parts.

c. To promote free circulation of the

blood through the ſalivary glands, when morbidly obſtructed there.

2. From their effects, as producing evacuation. Hence they may be employed:

a. To evacuate morbid accumulations of ſerum.

b. To produce a thorough change in the fluids of the body, when morbidly vitiated.

Theſe indications may be illuſtrated and confirmed from practical obſervations concerning the uſe of ſialagogues in caſes of Tooth-ach, Angina, Dropſy, and Lues Venerea.

LXII.

The principal circumſtances reſpecting the choice of orders in the claſs of ſiala-

gogues, may be deduced from the following obſervations concerning each:

1. SIALAGOGA TOPICA. The individuals referred to this order, are, from their nature, well fitted for thoſe indications which ſialagogues can fulfill by producing a change in determination. In ſome degree alſo, they are fitted for the purpoſes of evacuation: But, with theſe intentions they are rarely preferable to the interna.—From the degree of effect they produce, they are fitted for the higheſt changes in determination: But for inconſiderable changes only in point of evacuation. They are, however, employed for the purpoſes to be anſwered by this means, where evacuation is ſuddenly wanted, or where the continuance of it would be pernicious.—The conditions of the ſyſtem to which this order

are chiefly adapted, in preference to the interna, are, weak, delicate, and exhauſted habits.

2. SIALAGOGA INTERNA. The individuals reduced to this order are chiefly adapted for the indications which ſialagogues are capable of fulfilling by producing evacuation. As changing determination, they are well fitted to promote free circulation through the ſalivary glands: But they cannot be employed to diminiſh the impetus of the blood againſt neighbouring parts.——From the degree of effect they produce, they are univerſally preferable, where the moſt conſiderable evacuation is wanted. They are likewiſe beſt fitted for the moſt permanent change of determination.——The conſtitutions in which this order can

with greateſt ſafety be employed, are the ſtrong and vigorous.

LXIII.

The cautions to be obſerved in the employment of ſialagogues, as derived from their nature, reſpect chiefly: The ſtimulus they occaſion to the ſalivary glands and other neighbouring parts: The time required by the order of interna for the production of evacuation: The difficulty, perhaps, in ſome caſes, the impoſſibility, of exciting ſalivation by means of the interna: And the debility induced in the ſyſtem from exceſſive evacuation.—The conditions of the ſyſtem chiefly requiring attention in their employment, are: Old age: Conſtitutions habituated to ſialagogues: Peculiarities in conſtitution, determining the mer-

cury to act on other parts than the ſalivary glands: The menſtrual diſcharge: And pregnancy.—The circumſtances chiefly to be attended to with reſpect to the regimen neceſſary for this claſs, are: The preſervation of moderate temperature: The uſe of low diet: The uſe of diluents: The uſe of emollient, ſometimes of ſtimulant gargariſms: And the proper management of exerciſe.

LXIV.

Sialagogues are chiefly contra-indicated by the preſence of the following morbid ſtates: Uncommon determination to the ſalivary glands: Praeternatural ſenſibility in theſe glands: Deficiency of ſeroſity in the circulating fluids: A high degree of inanition: And general debility of the ſyſtem.

CHAP. IX.

OF BLOOD-LETTING.

§ 1. *Of the Nature of Blood-letting.*

LXV.

UNDER this aſſociation of the *methodus medendi*, is to be comprehended every artificial diſcharge of blood made with a view to the cure or prevention of diſeaſe.

LXVI.

From the different modes of blood-letting, the following direct effects are pro-

duced. They remove part of the circulating fluids. They produce a temporary increaſe of the celerity of the pulſe. They diminiſh the animal heat. They change the mode of circulation.

LXVII.

The changes induced in the ſyſtem from the primary effects of blood-letting, are: A diminution of the quantity of the blood: A diminution of the tenſion of the blood-veſſels: A diminution of the impetus of the blood through the ſyſtem in general: A diminution of the impetus of the blood in parts in the neighbourhood of thoſe veſſels from which the diſcharge is made, independent of the reſt of the ſyſtem: And a diminution of the quantity of fluids ſepa-

rated by different ſecretory organs in the body.

LXVIII.

The articles referred to this aſſociation may be diſtributed into the two following orders:

1. GENERAL BLOOD-LETTING; as examples of which may be mentioned: *Venaeſectio, Arteriotomia.*

2. TOPICAL BLOOD-LETTING.—*Scarificatio, Cucurbitulae cruentae, Hirudinum applicatio.*

§ 2. *Of the Uſe of Blood-letting.*

LXIX.

The indications which the different modes of blood-letting are capable of fulfilling, may be derived from the three following ſources:

1. From their diminiſhing the quantity of the blood. Hence they may be employed,

a. To diminiſh the quantity of fluids when too great for the then ſtate of the ſyſtem.

b. To take off morbid tenſion in the ſanguiferous ſyſtem.

2. From their altering the ſtate of motion in the blood. Hence they may be employed,

a. To leſſen the impetus of the circulation when morbidly augmented.

b. To moderate morbid heat.

3. And from their changing the courſe of the blood. Hence they may be uſed,

a. To diminiſh a morbid increaſe of action in particular blood-veſſels.

b. To leſſen the impetus of the blood againſt parts morbidly affected.

Theſe indications may be illuſtrated and confirmed from practical obſervations concerning the effects of blood-letting, as employed in caſes of Angina, Pleuriſy, Phthiſis Pulmonalis, Rheumatiſm, and Fever.

LXX.

The principal circumſtances regulating the choice of orders among the individuals

referred to this aſſociation, may be deduced from the following obſervations concerning each.

General Bleeding.—The individuals belonging to this order are, from their nature, well adapted for thoſe purpoſes which may be anſwered by blood-letting from a diminution of the quantity of blood; they are alone employed for the removal of plethora, and of morbid tenſion when taking place over the whole ſyſtem. They are likewiſe adapted for thoſe indications which blood-letting is capable of fulfilling, by changing the ſtate of motion in the blood: They are chiefly uſed to leſſen violent circulation: And are alone employed to moderate morbid heat.—From the degree of effect they produce, they are preferable to topical bleeding, where the

moſt conſiderable and moſt ſudden changes are required.—The conſtitutions to which they are principally adapted, are; the robuſt; the plethoric; and thoſe in the prime of life.

TOPICAL BLEEDING.—The individuals referred to this order are, from their nature, beſt adapted for thoſe purpoſes which may be anſwered by blood-letting from changing the mode of circulation. They may however be likewiſe uſed in ſome caſes for thoſe indications which blood-letting is capable of fulfilling, by changing the ſtate of motion in the blood, and by diminiſhing its quantity.—From the degree of effect they produce, they may be uſed where the higheſt changes in determination are requiſite; And are frequently preferable to general bleeding in thoſe caſes in which

inconſiderable evacuation only is admiſſible. The conſtitutions in which this order are particularly applicable, are the debilitated; the leucophlegmatic; the irritable; thoſe arrived at old age; and thoſe in the ſtate of infancy.

LXXI.

The cautions to be obſerved in the employment of blood-letting, as derived from its nature, reſpect chiefly: The ſtate of the pulſe during the operation: The quantity of blood diſcharged: The appearance of the blood, particularly of a buffy coat: And the effects of the diſcharge as inducing deliquium.—The conditions of the ſyſtem, which chiefly require attention in its employment are: Infancy: Old Age: Complaints during the prime of life exaſperated

by plethora: Urgent ſymptoms requiring bleeding where it is adverſe to the nature of the diſeaſe: The time of critical diſcharges: High degrees of irritability and torpor: And a conſtitutional diſpoſition to *deliquium animi*.—The circumſtances chiefly to be attended to in the regimen neceſſary reſpect: The adapting the diet and temperature to the diſeaſe under which the patient labours: The time of performing the operation: The ſtate of the ingeſta at that time: And the mode of the diſcharge.

LXXII.

Blood-letting is chiefly contra-indicated by the preſence of the following morbid ſtates: General inanition in the ſyſtem: The circulation remarkably weak or languid: And a high degree of debility in the voluntary motions.

CHAP. X.

Of Emmenagogues.

§ 1. *Of the Nature of Emmenagogues.*

LXXIII.

BY emmenagogues are meant thoſe medicines which poſſeſs a power of promoting that periodical diſcharge of blood by the uterus which, from the laws of the oeconomy, ſhould take place in certain conditions of the female ſyſtem.

LXXIV.

From the employment of emmenagogues the following direct effects are produced:

They ſtimulate the whole circulating ſyſtem. They ſtimulate, in a particular manner, the veſſels in the neighbourhood of the uterus; and this effect ſeems, in ſome degree, to be communicated to the veſſels of the uterus themſelves. They occaſion a particular affection of the whole nervous ſyſtem.

LXXV.

The changes induced in the ſyſtem from the primary effects of emmenagogues, are: An increaſe in the impetus of the blood circulating through the uterus and its neighbourhood: And an augmentation of the quantity of blood determined to the uterus. From ſome individuals referred to this claſs, there ariſes an increaſe of the

tonic power of the veſſels in the uterus; and, from others, a diminution of it.

LXXVI.

The different articles referred to the claſs of emmenagogues, may be diſtributed into the following orders:

1. EMMENAGOGA STIMULANTIA; as examples of which may be mentioned *Hydrargyrus*, *Antimonium*.

2. EMMENAGOGA IRRITANTIA.—*Aloe*, *Sabina*, *Cantharides*.

3. EMMENAGOGA TONICA.—*Ferrum*, *Lavatio frigida*, *Corporis exercitatio*.

4. EMMENAGOGA ANTISPASMODICA. *Asafoetida, Castoreum, Pediluvium.*

§ 2. *Of the Use of Emmenagogues.*

LXXVII.

The indications which emmenagogues are capable of fulfilling, may be derived from the two following sources:

1. From their changing the mode of circulation. Hence they may be employed,

a. To promote free circulation in the neighbourhood of the uterus when obstructed there.

b. To promote that accumulation of blood in the vessels of the uterus them-

ſelves, which is neceſſary to the menſtrual diſcharge.

c. To remove morbid obſtructions to the paſſage of blood into the cavity of the uterus.

2. From their acting on the ſtate of the animated ſolids. Hence they may be uſed,

a. To increaſe the tonic power of the ſyſtem where it is morbidly diminiſhed.

b. To increaſe the tonic power in the veſſels of the uterus in particular, when deficient there.

c. To remove ſpaſmodic ſtricture taking place on the veſſels of the uterus.

Theſe indications may be illuſtrated and confirmed, from practical obſervations con-

cerning the uſe of this claſs in different caſes of obſtructed menſes.

LXXVIII.

The principal circumſtances regulating the choice of orders in the claſs of emmenagogues may be deduced from the following obſervations concerning each.

1. EMMENAGOGA IRRITANTIA. The individuals referred to this order are, from their nature, well adapted for thoſe purpoſes, which may be anſwered by emmenagogues as affecting the mode of circulation: They are, however, but little fitted to remove obſtructions to the paſſage of blood into the cavity of the uterus: They may often, with advantage, be employed to promote an accumulation of blood in

the veſſels of the uterus: And are almoſt alone to be uſed to promote free circulation in its neighbourhood: They are likewiſe in ſome degree fitted for theſe indications to be anſwered by emmenagogues from an action on the animated ſolids: On ſome occaſions they are of particular advantage to increaſe the tonic power in the veſſels of the uterus.—From the degree of effect they are capable of producing, they may be uſed where very conſiderable changes are neceſſary.—The conſtitutions to which they are principally adapted, are the young, the plethoric, and thoſe with peculiar inſenſibility in the uterus.

2. EMMENAGOGA STIMULANTIA. The individuals referable to this order, are, from their nature, fitted for fulfilling indications derived from both ſources. As

changing the mode of circulation, they are well adapted for promoting an accumulation in the veſſels of the uterus, and for removing obſtructions to the paſſage of blood into its cavity; but are ſeldom preferable to the irritantia, for promoting free circulation in the neighbouring veſſels. As acting upon the ſtate of the animated ſolid, they are often uſeful for increaſing the tonic power of the ſyſtem in general. But are never applicable for removing ſpaſmodic ſtricture taking place on the veſſels of the uterus.—From the degree of effect they are capable of producing, they may be employed for conſiderable, but gradual changes only.—The conſtitutions in which this order are preferable to others, are torpid, and chlorotic habits.

3. EMMENAGOGA TONICA. The indi-

viduals referred to this order from their nature, are but little adapted for thoſe indications which emmenagogues are capable of fulfilling, by changing the mode of circulation. They are well calculated for ſome of thoſe purpoſes to be anſwered by an action on the animated ſolid; and they are, in general, preferable to other emmenagogues for increaſing the tonic power of the ſyſtem when morbidly diminiſhed.—From the degree of effect which, in this way, they are capable of producing, they may be employed where the higheſt changes are requiſite.—The conſtitutions to which they are chiefly adapted, are, the lax; and phlegmatic.

4. EMMENAGOGA ANTISPASMODICA.—The individuals reduced to this order are, from their nature, principally calculated to

obviate a particular ſtate in the uterus. The chief purpoſe to which they are adapted, is the removal of a ſpaſmodic ſtricture taking place on its veſſels.—With this intention they may be employed where the moſt conſiderable changes are requiſite.—The conſtitutions to which they are more eſpecially ſuited, are, the delicate; the weak; and the irritable.

LXXIX.

The cautions to be obſerved in the employment of emmenagogues, as derived from their nature, chiefly reſpect: The conſequences of a cure, if puſhed too far: The irritation occaſioned to the inteſtines: And the ſtimulus affecting the whole ſyſtem.—The conditions of the ſyſtem which chiefly require attention in their employ-

ment are: The age of the patient: The complaints to which ſhe has formerly been liable: The duration of her preſent complaints: And her general character.—The circumſtances chiefly to be attended to in the regimen neceſſary, reſpect: The temperature in which the patient is kept: The uſe of moderate exerciſe: And the employment of liberal diet.

LXXX.

In enumerating the morbid conditions contra-indicating emmenagogues, a diſtinction is to be made betwixt thoſe which contra-indicate the reſtoration of the diſcharge altogether, and thoſe which contra-indicate particular modes of reſtoring it.

As morbid conditions, which entirely contra-indicate the reſtoration of this diſ-

charge, and, of courſe, the employment of the claſs with that intention, the following may be mentioned: A high degree of inanition: Various topical affections of the uterus; ſuch, for example, as ulcers, cancers, &c. And the particular periods of life during which, from the laws of the ſyſtem, this diſcharge ſhould be ſtopt.

As morbid conditions contra-indicating particular modes of reſtoring it, may be mentioned: A topical inflammation, or particular irritable ſtate of the rectum, contra-indicating the irritant: Uncommon impetus of the circulation, or particular debility of other parts, contra-indicating the uſe of the ſtimulant; and morbid rigidity of the ſyſtem, contra-indicating the tonic emmenagogues.

CHAP. XI.

Of Anthelmintics.

§ 1. *Of the Nature of Anthelmintics.*

LXXXI.

BY anthelmintics are meant thoſe medicines which, without endangering the life of the patient, are effectual in procuring the removal of worms lodged in the human body.

LXXXII.

The direct effects ariſing from this claſs of medicines are intended to be exerted only on the worms themſelves; but there

are, at the ſame time, few, if any medicines, which, when employed with this intention, do not alſo produce ſome effect on the animal body: To enter upon the conſideration of theſe, however, would be foreign to this claſs. As anthelmintics, they produce the following effects. They kill worms to which they come to be applied in the body. They expel them from the body. They prevent their generation in the body.

LXXXIII.

It was above alledged, that the direct effects occaſionally taking place in the human ſyſtem from the different articles referred to this claſs, could not, with propriety, come under conſideration when theſe are conſidered merely as anthelmintics. In

like manner, the only changes here to be considered, are those which arise from their action upon the worms themselves. These are the removal of an almost infinite variety of different symptoms, which worms occasion while they are lodged in the body.

LXXXIV.

The different articles referred to the class of anthelmintics may be distributed into the following orders:

1. ANTHELMINTICA VENENOSA; as examples of which may be mentioned, *Hydrargyrus*, *Stannum*, *Sulphur*.

2. ANTHELMINTICA LUBRICANTIA.—*Oleum Olivarum*, *Oleum Lini*.

3. ANTHELMINTICA TONICA.—*Sabina, Tanacetum, Santonicum.*

4. ANTHELMINTICA CATHARTICA.—*Scammonium, Jalappa, Aloe, Gambogia.*

§ 2. *Of the Use of Anthelmintics.*

LXXXV.

The indications of cure which anthelmintics are capable of fulfilling, may be derived from the two following sources.

1. From their action on the worms themselves. Hence they may be employed,

a. To kill worms lodged in different parts of the human body.

2. From their action on the ſyſtem. Hence they may be uſed,

a. To promote the expulſion of worms from the body, whether dead or alive.

b. To prevent the generation of worms in the body.

Theſe indications may be illuſtrated and confirmed from practical obſervations concerning the uſe of anthelmintics in caſes of Atrophia, Diarrhœa, and Vomitus.

LXXXVI.

The principal circumſtances regulating the choice of orders in the claſs of anthel-

mintics, may be deduced from the following obſervations concerning each:

1. ANTHELMINTICA VENENOSA. The individuals belonging to this order, from their nature, are chiefly fitted to kill worms. Their power of producing this effect is not deſtroyed by the action of the *primae viae*. Hence they are often preferable when theſe inſects are entirely out of the inteſtinal canal.—From the degree of effect they produce, they are fitted to anſwer this purpoſe in the moſt obſtinate caſes.—The conſtitutions to which they are principally adapted, are: Strong and robuſt habits: Thoſe in the prime of life: And thoſe with a degree of torpor in the alimentary canal.

2. ANTHELMINTICA LUBRICANTIA.—

The individuals belonging to this order are, from their nature, alſo adapted to kill worms: They are, however, fitted only to fulfill this indication when theſe inſects are lodged in parts of the body in which they can be immediately applied to them, without being greatly expoſed to the action of the ſyſtem.—From the degree of effect they produce in this way, they are fitted only for leſs obſtinate caſes.—The conſtitutions to which they are principally adapted are, reduced extenuated habits, and thoſe in whom there occurs an abraded ſtate of the alimentary canal, attended with uncommon ſenſibility.

3. ANTHELMINTICA TONICA. The individuals belonging to this order are likewiſe, from their nature, chiefly adapted for thoſe indications which anthelmintics are

capable of fulfilling by their action on the ſyſtem. They may ſometimes be employed to promote the expulſion of worms from the body. But they are chiefly of uſe to prevent their generation.—From the degree of effect they produce, they are fitted for thoſe caſes only where the ſlighteſt changes are requiſite, and are chiefly employed as a firſt remedy.—The conſtitutions to which they are principally adapted, are: Children: Thoſe of delicate habits: And thoſe with a relaxed ſtate of the inteſtinal canal.

4. ANTHELMINTICA CATHARTICA.—The individuals belonging to this order are, from their nature, chiefly adapted to expell worms from the body. Many individuals referred to the order, may, however, be alſo uſed to kill worms.—From the de-

gree of effect they produce, they may be employed for the ſlighteſt, as well as moſt conſiderable changes in the expulſion of worms. As killing worms, though leſs powerful than the mineralia, yet they will often ſucceed in caſes where the oleoſa have failed.——The conſtitutions in which they are chiefly uſeful are: Strong and robuſt habits: Thoſe in the prime of life: And thoſe in whom the *primæ viæ* are loaded with ſordes.

LXXXVII.

The cautions to be obſerved in the employment of anthelmintics, as derived from their nature, chiefly reſpect, The other effects they will have upon the ſyſtem, independent of their action as anthelmintics.—The conditions of the ſyſtem which chiefly

require attention in their employment, are, infancy, delicacy of habit, and other diſeaſes of the patient.—The circumſtances chiefly to be attended to in the regimen neceſſary reſpect: The avoiding farinaceous diet: And the right management of exerciſe.

LXXXVIII.

There are, perhaps, no morbid conditions of the ſyſtem, during which the removal of worms from the body may not, with propriety, be attempted by one means or other. But, although it may be doubtful, whether there are morbid conditions contra-indicating the whole claſs; yet, it cannot be queſtioned, that there are many contra-indicating particular orders. Among others may be mentioned: An abraded or inflamed ſtate of the inteſtines, contra-indi-

cating the venenosa: Accumulations of fordes in the *primæ viæ*, contra-indicating the lubricantia: A peculiar sensibility of the stomach, contra-indicating the tonica: And topical inflammation of the intestines, previous looseness, or a high degree of inanition, contra-indicating the cathartica.

CHAP. XII.

Of Lithontriptics.

§ 1. *Of the Nature of Lithontriptics.*

LXXXIX.

THE claſs of lithontriptics, from the ſtrict ſenſe and common acceptation of the word, ſhould comprehend medicines poſſeſſing a power of diſſolving calculi in the urinary paſſages. It is, however, a queſtion, whether there be in nature any ſuch ſubſtances. By lithontriptics, as here adopted to expreſs a claſs of medicines, are meant thoſe ſubſtances

which poſſeſs a power of removing a diſpoſition in the body to the formation of calculi.

XC.

From the employment of lithontriptics the following direct effects are produced. They deſtroy acids contained in the ſtomach. They condenſe the muſcular fibres of the *primæ viæ*. They produce a ſimilar affection through the ſyſtem in general.

XCI.

The changes induced in the ſyſtem from the primary effects of lithontriptics, are: An increaſe of denſity in the ſolids of the body: An alteration in the ſtate of the circulating fluids.

XCII.

The different articles referred to the claſs of lithontriptics, may be diſtributed into the following orders:

1. LITHONTRIPTICA ANTACIDA; as examples of which may be mentioned, *Aqua Calcis*, *Alcali Cauſticum*.

2. LITHONTRIPTICA ADSTRINGENTIA. *Uva Urſi*.

§ 2. *Of the Uſe of Lithontriptics.*

XCIII.

The individuals belonging to this claſs are, from their nature, confined to what may, ſtrictly ſpeaking, be reckoned one

diſeaſe only; in counteracting which, the indications they are fitted to fulfil may be derived from the following ſources.

1. From their altering the ſtate of the ſolids in the body. Hence they may be employed,

a. To obviate a particular ſtate of laxity in the ſtomach.

b. To obviate a particular morbid laxity in the kidney.

2. And from their altering the ſtate of the circulating fluids. Hence they may be employed,

a. To correct a peculiar morbid ſtate in the pabulum furniſhed for the ſecretion of urine.

Theſe indications may be illuſtrated from

practical observations concerning the employment of lithontriptics in various calculous complaints.

XCIV.

The principal circumstances regulating the choice of orders in the class of lithontriptics may be deduced from the following observations concerning each:

1. LITHONTRIPTICA ANTACIDA. The individuals belonging to this order are, from their nature, capable of fulfilling indications referred to both sources.—From the degree of effect they produce, they may be adapted to every change. The constitutions to which they are best suited are, those disposed to acidity in the *primæ viæ*.

2. LITHONTRIPTICA ADSTRINGENTIA.

The individuals belonging to this order, are, from their nature, particularly adapted for an action upon the ſtate of the ſolids. But they are likewiſe admiſſible for altering the ſtate of the circulating fluids.—From the degree of effect they produce, they are chiefly applicable where no very conſiderable changes are requiſite.——The conditions of the ſyſtem to which they are principally adapted are, habits obviouſly lax. But they are often of particular ſervice in others where there are no manifeſt marks indicating laxity.

XCV.

The cautions to be obſerved in the employment of lithontriptics, as derived from

their nature, chiefly reſpect: The total deſtruction of acid in the ſtomach: The effects of alkalines on the ſtomach, when not defended by an acid: And the corrugation of the *primæ viæ* from the uſe of the adſtringentia.—The conditions of the ſyſtem which chiefly require attention in their employment are: The diſpoſition to acidity in the ſtomachs of children: Various morbid affections of the ſtomach: And the exceſſive vomiting, which is ſo frequently a concomitant of calculous complaints.—The circumſtances to be attended to in the regimen neceſſary, principally reſpect the avoiding relaxing or aceſcent diet.

XCVI.

There is, perhaps, no caſe in which the uſe of this claſs is entirely contra-indicated.

As morbid ſtates contra-indicating particular orders may be mentioned: A tendency to alkalefcency in the ſtomach, contra-indicating the antacida: And a praeternatural corrugation of the ſtomach, contra-indicating the adſtringentia.—

CHAP. XIII.

OF ANTACIDS.

§ 1. *Of the Nature of Antacids.*

XCVII.

BY antacids are meant thoſe medicines which poſſeſs a power of deſtroying acid, while they may, at the ſame time, without danger, be taken internally into the human body.

XCVIII.

The more immediate effects of the antacid medicines, or at leaſt the effects pro-

duced by the ſubſtances belonging to this claſs when they act as antacids, are not exerted upon the human body, but upon the acid to which they come to be applied. Their action upon the ſtomach or other parts of the *primae viae*, in which acid may happen to be lodged, is to be conſidered as merely accidental. And the only effect to be aſcribed to theſe ſubſtances, as belonging to this claſs, is, that they neutralize thoſe acids to which they come to be applied in the *primae viae*.

XCIX.

After what has been ſaid with regard to the direct effects ariſing from the medicines referred to this claſs, it would be needleſs to obſerve, that the only changes here to be conſidered, are thoſe which they

produce as deſtroying acid. As deſtroying ſuperabundant acid, they act againſt a morbid ſtate; what is therefore to be ſaid with regard to this, will more properly be referred to the indications of cure. As deſtroying acid not ſuperabundant, the change they produce has a pernicious effect; for, although they be, in their own nature, antiſeptic, yet, from this circumſtance, they have a putrid tendency; as an acid evolved in the ſtomach ſeems to be the natural antiſeptic of the human ſyſtem.

C.

The different articles referred to the claſs of antacids, may be diſtributed into the following orders:

I. ANTACIDA ECCOPROTICA; as ex-

amples of which may be mentioned *Magneſia alba, Tartarum ſolubile, Sapo.*

2. ANTACIDA RESTRINGENTIA.—*Creta, Oculi Cancrorum, Teſtae Oſtreorum.*

§ 2. *Of the Uſe of Antacids.*

CI.

The indications of cure which antacid medicines are capable of fulfilling, are entirely to be derived from their power of deſtroying acid in the *primæ viæ*. Hence they may be employed,

a. To remove a ſenſation of ſourneſs in the *primæ viæ*.

b. To reſtore the natural appetite for food, when morbidly vitiated by acid in the ſtomach.

c. To reſtore the natural action to the alimentary canal, when diſordered from the cauſe mentioned above.

Theſe indications may be illuſtrated and confirmed from practical obſervations concerning the uſe of antacids in caſes of Cardialgia, Dyſpepſia, and Hypochondriaſis.

CII.

The different individuals referred to both orders of antacids are, from their nature, well adapted for anſwering all the indications which the claſs are capable of fulfilling.—From the degree of effect they produce, all of them are likewiſe adapted for the higheſt as well as the moſt conſiderable changes which may be requiſite.—The preference of one order to another, in the uſe

of this claſs of medicines, is almoſt entirely to be deduced from the condition of the ſyſtem. The order of eccoprotica are beſt adapted to thoſe caſes in which coſtiveneſs occurs, and the reſtringentia to thoſe attended with looſeneſs.

CIII.

The cautions to be obſerved in the employment of antacids, as derived from their nature, chiefly reſpect: The total deſtruction of acid in the *primæ viæ*.—The conditions of the ſyſtem principally requiring attention in their employment are: Infancy: And Old Age; eſpecially, when, at this laſt period of life, the acidity is accompanied with coſtiveneſs.—The circumſtances chiefly to be attended to in the regimen neceſſary for this claſs, reſpect: Regularity

in diet: The avoiding any conſiderable diſtenſion of the ſtomach: The avoiding aceſcent food: And the uſe of exerciſe.

CIV.

Antacids are chiefly contra-indicated by the preſence of the following morbid ſtates: The prevalence of alcaleſcency in the *primæ viæ*. And a tendency to putridity in the general maſs of fluids.

CHAP. XIV.

Of Antalkalines.

§ 1. *Of the Nature of Antalkalines.*

CV.

THE claſs of antalkalines may be conſidered as in a great meaſure the converſe of the claſs laſt mentioned. By the individuals, comprehended under this aſſociation, are meant thoſe medicines which poſſeſs a power of neutralizing alkalines, and which can be ſo regulated as to be taken internally without danger.

CVI.

The ſame obſervation holds concerning the direct effects of this claſs as was made of the laſt. The only effects to be aſcribed to them, as antalkalines, are thoſe which they exert upon the alkali itſelf. The only direct effect therefore to be mentioned as produced by the medicines belonging to this claſs, is, that they neutralize thoſe alkaline ſubſtances to which they come to be applied in the body.

CVII.

With regard to the changes in the ſyſtem ariſing from antalkalines, it is evident, as was formerly obſerved in the caſe of antacids, that the only changes which can be aſcribed to them, are thoſe which they pro-

duce as deſtroying ſuperabundant alkali. Theſe, however, as depending on the removal of a morbid affection, will, with greater propriety, be conſidered under the uſe of the claſs.

CVIII.

The different articles referred to the claſs of antalkalines, may be diſtributed into the following orders:

1. ANTALKALINA VEGETABILIA; as examples of which may be mentioned *Acetoſa*, *Berberis*, *Tamarindus*.

2. ANTALKALINA SALINA.—*Acidum Vitriolicum*, *Nitroſum*, *Muriaticum*, *Vegetabile*.

§ 2. *Of the Uſe of Antalkalines.*

CIX.

The indications of cure which antalkalines are capable of fulfilling, are entirely to be derived from their power of neutralizing alkali. Hence they may be employed,

a. To remove a ſenſation of alkaleſcency in the *primae viae*.

b. To reſtore the natural diſpoſition to acidity in the ſtomach.

c. To correct praeternatural putridity in the alimentary canal.

Theſe indications may be illuſtrated and confirmed from practical obſervations con-

cerning the uſe of antalkalines in caſes of Polydipſia, Scurvy, and Dyſentery.

CX.

The principal circumſtances regulating the choice of orders, in the claſs of antalkalines, may be deduced from the following obſervations concerning each:

1. ANTALKALINA VEGETABILIA. The individuals belonging to this order, from their nature, may be employed for anſwering all the indications which antalkalines are capable of fulfilling: But they are chiefly preferable for reſtoring the natural diſpoſition to acidity in the ſtomach.—From the degree of effect they produce, are beſt adapted to thoſe caſes where an inconſiderable change only is wanted.—From the con-

dition of the patient, they are chiefly applicable to young people, and to thoſe whoſe ſtomachs are particularly delicate.

2. ANTALKALINA SALINA. The individuals belonging this order, from their nature, may likewiſe be employed for all the indications. They are, in general, preferable for removing alcaleſcency in the *primae viae*, and for correcting praeternatural putridity in the alimentary canal.—From the degree of effect they produce, are preferable where the higheſt changes are requiſite.—From the condition of the patient, they are chiefly applicable to people in the prime of life, or paſt that period: And to thoſe whoſe ſtomachs are not apt to be affected from ſlight cauſes.

CXI.

The cautions to be obſerved in the emoloyment of antalkalines, as derived from their nature, chiefly reſpect: Their properties as ſtimulants, after having fully ſaturated the alkaleſcency: And the ſedative effects which they afterwards univerſally exert in the ſyſtem.—The conditions of the ſyſtem which chiefly require attention in their employment, are: Childhood: A high degree of ſenſibility in the ſtomach: Habits in which their former employment has been obſerved to be attended with any peculiar effects: And thoſe affected with bilious complaints, eſpecially if they have been contracted, or exiſt in warm climates. —The circumſtances chiefly to be attended to in the regimen neceſſary, reſpect: The

avoiding alcaleſcent diet: And the proper regulation of it when employed.

CXII.

Antalkalines are chiefly contra-indicated by the preſence of the following morbid ſtates: A conſtitutional diſpoſition to cardialgia, on the uſe of acids: Circulation uncommonly ſlow or languid: And a remarkable diminution of animal heat.

CHAP. XV.

Of Attenuants.

§ 1. *Of the Nature of Attenuants.*

CXIII.

BY attenuants are meant thoſe medicines which, from being uſed internally, poſſeſs a power of giving the human blood a conſiſtence more thin and fluid than it had previous to their uſe.

CXIV.

From the employment of attenuants the following direct effects are produced. They dilute the contents of the *primæ viæ*. They

add an uncommon proportion of ſeroſity to the blood. They increaſe the ſolvent power of the ſeroſity. They render the conſiſtence of the general maſs of blood more liquid than it was previous to their uſe.

CXV.

The changes induced in the ſyſtem from the primary effects of attenuants are: Free circulation through the minute blood-veſſels: An increaſe of various ſecretions, eſpecially of the ſerous ones: An increaſe of tranſudation into the various cavities of the body.

CXVI.

The different articles referred to the

claſs of attenuants, may be diſtributed into the following orders:

1. ATTENUANTIA DILUENTIA; as examples of which may be mentioned, *Aqua*, *Aquoſa*, *Serum Lactis*.

2. ATTENUANTIA SOLVENTIA.—*Sales Neutri*, *Sapo*.

§ 2. *Of the Uſe of Attenuants.*

CXVII.

The indications of cure which attenuants are capable of fulfilling, may be derived from the two following ſources:

1. From their altering the ſtate of the

blood itſelf. Hence they may be employed,

a. To remove morbid viſcidity in the blood.

b. To reſtore free circulation when morbidly obſtructed in the ſmall veſſels.

2. And from their affecting the ſecretions. Hence they may be employed,

a. To increaſe the quantity of ſerous evacuations, where morbidly diminiſhed.

b. To render theſe ſerous evacuations more fluid, where they are morbidly thick and viſcid.

Theſe indications may be illuſtrated and confirmed from practical obſervations concerning the effects of this claſs of medicines in caſes of Lentor and Iſchuria.

CXVIII.

The principal circumſtances regulating the choice of orders in the claſs of attenuants may be deduced from the following obſervations concerning each:

1. ATTENUANTIA DILUENTIA. The individuals belonging to this order, are, from their nature, well adapted for fulfilling all the indications to be anſwered by the claſs.—From the degree of effect they produce, they are fitted for thoſe caſes where the moſt conſiderable changes are neceſſary: They are often alſo preferable where ſudden changes are requiſite—The conſtitutions to which they are principally adapted, are: The Young: And the Plethoric.

2. ATTENUANTIA SOLVENTIA. The individuals belonging to this order, as well as the former, are likewise adapted to all the indications for which attenuants can be employed: But they are more especially fitted for those which may be answered by an alteration being produced on the blood itself.—From the degree of effect they are capable of producing, they are also best suited to those cases in which inconsiderable changes are required: They are also best adapted for producing slow and permanent changes.—The constitutions to which they are more especially suited, are old and phlegmatic habits.

CXIX.

The cautions to be observed in the employment of attenuants, as derived from

their nature, chiefly reſpect: The relaxation which they produce in the ſtomach: The nauſea which they frequently occaſion: And the ſecretions which they particularly increaſe.—From the condition of the patient, the circumſtances to which attention is chiefly requiſite, are: The former complaints with which the patient may have been affected: The preſent ſtate of the various ſecretions: And the ſtate of the circulation.—The circumſtances chiefly to be attended to in the regimen neceſſary, reſpect: The avoiding exerciſe, particularly to any degree of violence: The avoiding, in diet, ſubſtances affording a great quantity of mucilage: And the avoiding extremes in the temperature in which the patient is kept.

CXX.

Attenuants are chiefly contra-indicated by the preſence of the following morbid ſtates: Praeternatural tenuity of the general maſs of fluids: A tendency in the ſyſtem to morbid accumulations of ſeroſity: And a remarkable morbid increaſe of any of the ſerous ſecretions.

CHAP. XVI.

Of Inspissants.

§ 1. *Of the Nature of Inspissants.*

CXXI.

BY inspissants are meant those medicines which, from being taken internally, have a power of giving the human blood, while it circulates in the system, a consistence more thick and viscid than it had previous to their use.

CXXII.

From the employment of inspissants the following direct effects are produced :

They afford a copious ſupply of chyle. They render the chyle leſs ſerous than in the ordinary ſtate of nature. They introduce into the blood a matter capable of blunting ſaline acrimony. They give the blood itſelf a more thick and viſcid conſiſtence than it had before.

CXXIII.

The changes induced in the ſyſtem from the primary effects of inſpiſſants are: A leſs ſpeedy tranſmiſſion of blood than before through the blood-veſſels, eſpecially through the ſmaller ones: A diminution of different ſerous ſecretions: And a diminution of the quantity of ſeroſity tranſuding into the different cavities of the body.

CXXIV.

The different articles referred to the claſs of inſpiſſants may be diſtributed into the following orders:

1. INSPISSANTIA FARINOSA; as examples of which may be mentioned, *Hordeum, Oryza, Triticum.*

2. INSPISSANTIA MUCILAGINOSA.—*Althæa, Gummi Arabicum, Ichthyocolla.*

§ 2. *Of the Uſe of Inſpiſſants.*

CXXV.

The indications of cure which inſpiſſants are capable of fulfilling may be derived from the two following ſources:

1. From their altering the ſtate of the blood itſelf. Hence they may be employed,

a. To remove morbid tenuity in the blood.

b. To prevent the tranſmiſſion of red blood through veſſels not naturally fitted to receive it.

2. From their affecting the ſecretions. Hence they may be employed,

a. To diminiſh the quantity of ſerous ſecretions, where morbidly increaſed.

b. To render thoſe ſecretions more viſcid, where morbidly thin and fluid.

Theſe indications may be illuſtrated and confirmed from practical obſervations concerning the effects of this claſs of medi-

cines as employed in caſes of Haemorrhagy, Diarrhoea, and Colliquative Sweats.

CXXVI.

The principal circumſtances regulating the choice of orders in the claſs of inſpiſſants may be deduced from the following obſervations concerning each:

1. INSPISSANTIA FARINOSA. The individuals referred to this order are, from their nature, equally adapted to both ſources of indication; while, at the ſame time, they do not ſeem to be ſo particularly fitted to any one, that from thence any cauſe of preference can be deduced.—From the degree of effect they produce, they are, upon their firſt application, fitted for inconſiderable changes only; but where changes

are not immediately required, they may be employed to produce the moſt gradual and higheſt that are requiſite.—The conſtitutions to which they are principally adapted, in preference to the order next to be mentioned, are the debilitated; and thoſe in whom the digeſtive faculties are very weak.

2. INSPISSANTIA MUCILAGINOSA. The individuals belonging to this order are likewiſe, from their nature, adapted to both ſources of indication; but they are principally applicable for affecting the ſtate of the ſecretions.—From the degree of effect they produce, they are preferable in thoſe caſes where the higheſt and moſt ſudden changes are wanted.—The conſtitutions to which they are principally adapted are,

the irritable; and thoſe in whom the digeſtive faculties are ſtrong.

CXXVII.

The cautions to be obſerved in the employment of inſpiſſants, as derived from their nature, chiefly reſpect: Their action on the ſtomach and inteſtines: The ſtate of the belly which they produce: Their effects upon the circulation in general: And the ſtate of the ſerous ſecretions during their employment.—The conditions of the ſyſtem which chiefly require attention in their employment are: Peculiar delicacy of the ſtomach: And a conſtitutional diſpoſition to flatulency or acidity.—The circumſtances chiefly to be attended to in the regimen neceſſary for this claſs, reſpect: The regulation of diet in ſuch a manner as to conſpire with the operation of the medi-

cine: The proper application of exercise: And the means of promoting the serous excretions from the body.

CXXVIII.

Inspissants are chiefly contra-indicated by the presence of the following morbid states: A high degree of debility in the digestive organs: Morbid viscidity of the blood: Or a praeternatural diminution of the secretions in general.

CHAP. XVII.

Of Antiseptics.

§ 1. *Of the Nature of Antiseptics.*

CXXIX.

BY antiseptics are meant those medicines which possess a power of preventing animal matters from passing into a state of putrefaction, and of obviating putrefaction when already begun.

CXXX.

Before attempting to enumerate the direct effects arising from antiseptics, it will

be neceſſary to obſerve, that the influence of the claſs only takes place, or, at leaſt, is only obvious, in thoſe caſes where a ſtate of putrefaction exiſts, or where there is an evident tendency to it.

The direct effects ariſing from this claſs of medicines are, in ſome degree, varied from the method of their application. The principal cauſe of this variety is, their being uſed externally or internally. But, their effects as antiſeptics, will not only be moſt obvious, but will admit of the beſt illuſtration from the enquiry being confined to the former.

Antiſeptics, upon being externally applied to living animal matters in a ſtate of putrefaction, produce the following effects:

They change the appearance of thoſe matters from a livid or blueiſh caſt, to a more florid red. They render their texture more firm and compact. They alter the matter diſcharged to a more thick conſiſtence and whiter colour. And they remove a ſtrong foetid ſmell, ariſing from the part before their uſe. A combination of all theſe effects is expreſſed in the general property by which they are defined.

CXXXI.

As the direct effects of this claſs of medicines are thoſe exerted in producing an antiſeptic quality; ſo the changes in the ſyſtem to be aſcribed to them, are thoſe ariſing from this antiſeptic power, when produced. Theſe, as being entirely referable to a morbid ſtate, will, with greater pro-

priety, fall under the illuſtration of the indications of cure which they may be employed to fulfil.

CXXXII.

The different articles referred to the claſs of antiſeptics may be diſtributed into the following orders:

1. ANTISEPTICA TONICA; as examples of which may be mentioned, *Cortex Peruvianus*, *Abſinthium*, *Chamæmelum*.

2. ANTISEPTICA REFRIGERANTIA.—*Sales acidi*, *Sales neutri*.

3. ANTISEPTICA STIMULANTIA.—*Vinum*, *Alcohol*, *Oleum Terebinthinae*.

4. ANTISEPTICA ANTISPASMODICA.—*Camphora, Asafoetida.*

§ 2. *Of the Use of Antiseptics.*

CXXXIII.

The indications of cure which antiseptics are capable of fulfilling may be derived from the two following sources:

1. From their preventing putrefaction. Hence they may be employed,

a. To supply the antiseptic power in the human body, where it is morbidly deficient.

b. To obviate the assimulating quality of any putrid ferment introduced into the body.

2. From their obviating putrefaction already begun. Hence they may be uſed,

a. To correct a putrid diatheſis in the humours.

b. To prevent the further progreſs of morbid putrefaction taking place in the ſolids.

c. To reſtore to a ſound ſtate ſolids morbidly putrid.

Theſe indications may be illuſtrated and confirmed from practical obſervations concerning this claſs of medicines, in caſes of Scurvy, Putrid Fever, and Gangrene.

CXXXIV.

The principal circumſtances regulating the choice of orders in the claſs of anti-

ſeptics may be deduced from the following obſervations concerning each:

1. ANTISEPTICA TONICA. The individuals referred to this order are, from their nature, fitted for all the purpoſes to be anſwered by the claſs. They are preferable to the others where it is neceſſary to combine an aſtringent effect with the antiſeptic power. They are in general well adapted for external uſe.—From the degree of effect they produce, they are fitted for thoſe caſes in which conſiderable and ſudden changes are neceſſary.—They are well ſuited to every condition of body, and in general, preferable to other antiſeptics, with relaxed habits.

2. ANTISEPTICA REFRIGERANTIA. The individuals referred to this order, are, from

their nature, chiefly applicable in thoſe caſes where marks of a putreſcent ſtate appear, with violent inflammatory ſymptoms.—From the degree of effect they are capable of producing, they can be employed only where inconſiderable changes are requiſite.—The conſtitutions to which they are principally adapted are: The Young: The Vigorous: And the Plethoric.

3. ANTISEPTICA STIMULANTIA. The individuals referred to this order are, from their nature, chiefly applicable in thoſe caſes where it is neceſſary to combine a general ſtimulus to the ſyſtem with an antiſeptic property. They are in general beſt fitted for thoſe caſes in which it is neceſſary to prevent an antiſeptic tendency in the ſyſtem.—From the degree of effect they are capable of producing, they can be employ-

ed only where ſlight changes are neceſſary; but they are preferable to other antiſeptics when theſe are moſt ſuddenly required.—The conſtitutions to which they are chiefly adapted are: The Old: The Debilitated: And thoſe with ſluggiſh or languid circulation.

4. ANTISEPTICA ANTISPASMODICA.

The individuals belonging to this order, are, from their nature, chiefly adapted to thoſe caſes where it is neceſſary to conjoin antiſeptic with antiſpaſmodic powers.—From the degree of effect they are capable of producing, they are fitted for thoſe caſes in which conſiderable and ſudden changes are requiſite.—The conſtitutions to which they are principally adapted are irritable habits.

CXXXV.

The cautions to be obſerved in the employment of antiſeptics, as derived from their nature, chiefly reſpect the other active powers which they combine with an antiſeptic property. Hence they apply, not to the whole claſs, but to particular orders. They will therefore, with greater propriety, fall to be conſidered elſewhere. With regard to the whole claſs, attention is chiefly neceſſary to the celerity with which their antiſeptic effects are produced.—The conditions of the ſyſtem which principally require attention in their employment are: Old Age: Pregnancy: And the time of the menſtrual diſcharge.——The circumſtances particularly to be attended to in the

regimen neceſſary, reſpect: The application of free and of cool air: The avoiding alcaleſcent diet: And uſe of exerciſe.

CXXXVI.

There does not ſeem to be any morbid condition, which contra-indicates the uſe of all the individuals referred to the claſs of antiſeptics. The contra-indications to be mentioned then apply only to particular orders. The internal uſe of the tonica are chiefly contra-indicated by a peculiar ſenſibility of the ſtomach: And of the refrigerantia, by a debility of the vital powers. The morbid ſtates contra-indicating the other orders, are the ſame with what forbid the uſe of the claſſes of ſtimulants and antiſpaſmodics.

CHAP. XVIII.

OF ASTRINGENTS.

§ 1. *Of the Nature of Aſtringents.*

CXXXVII.

BY aſtringents are meant thoſe medicines which poſſeſs a power of condenſing the animal fibre, without producing this effect in conſequence of any mechanical action.

CXXXVIII.

From the uſe of aſtringents the following direct effects are produced: They ex-

cite a peculiar ſenſation referred to the part to which they are applied; if to the organs of taſte, a ſenſe of dryneſs. They produce a remarkable corrugation in the parts on which they more immediately act. They occaſion, in ſome degree, a ſimilar affection through the reſt of the ſyſtem. Some individuals belonging to this claſs produce an evident condenſation in dead animal fibres.

CXXXIX.

The changes induced in the ſyſtem from the primary effects of aſtringents, are: An increaſe of the power of coheſion in various parts of the animal body: An increaſe of what may be termed the tonic power in the ſyſtem: A diminution of the capacity

of containing veſſels in the ſyſtem: A diminution of irritability, and perhaps, in ſome degree, of ſenſibility.

CXL.

The different articles referred to the claſs of aſtringents may be diſtributed into the following orders:

1. ADSTRINGENTIA STYPTICA; as examples of which may be mentioned *Alumen, Cuprum, Ferrum.*

2. ADSTRINGENTIA CORRUGANTIA.—*Roſa, Quercus, Gallae.*

3. ADSTRINGENTIA INDURANTIA.—*Alcohol, Acida.*

4. ADSTRINGENTIA TONICA.—*Exercitium, Frigus, Frictio.*

§ 2. *Of the Use of Aſtringents.*

CXLI.

The indications of cure which the claſs of aſtringent medicines are capable of fulfilling may be deduced from the following ſources.

1. From the alteration they produce on the ſtate of the moving ſolids. Hence they may be employed,

a. To obviate original delicacy.

b. To reſtore natural compactneſs to parts morbidly relaxed.

c. To reſtore diminiſhed tonic power.

d. To diminiſh mobility when morbidly increaſed.

2. From the alteration they produce on the ſtate of the containing veſſels. Hence they may be employed,

a. To diminiſh ſecretions morbidly augmented.

b. To increaſe the power of retaining excrementitious matters when morbidly diminiſhed.

c. To produce a conſtriction on the orifices of ruptured veſſels.

Theſe indications may be illuſtrated and confirmed from practical obſervations concerning the effects of aſtringents in caſes

of Hyſteria; Epilepſy; Haemorrhagy; and Diarrhoea.

CXLII.

The principal circumſtances regulating the choice of orders in the claſs of aſtringents, may be deduced from the following obſervations concerning each.

1. ADSTRINGENTIA STYPTICA.—The individuals belonging to this order, from their nature, are well adapted for fulfilling indications referred to both ſources. As acting on the ſtate of the ſolids, they may be employed with advantage to reſtore diminiſhed tonic power, and to diminiſh morbid mobility. And they are, in general, preferable to other adſtringents for reſtoring natural compactneſs to parts mor-

bidly relaxed. As altering the ſtate of the containing veſſels, they may be employed for fulfilling all the indications mentioned. And they are particularly preferable to the orders of corrugantia and tonica for producing a conſtriction on the orifices of ruptured veſſels.——From the degree of effect they produce, they may be employed where the higheſt and moſt ſudden changes are wanted.——The conſtitutions to which they are particularly adapted are the aged; thoſe exhauſted by long continued evacuations; and thoſe whoſe complaints are particularly urgent.

2. ADSTRINGENTIA CORRUGANTIA.—The individuals belonging to this order are, from their nature, as well as the former, adapted to both ſources of indication.

They are chiefly uſed to reſtore diminiſhed tonic power: To diminiſh morbid irritability: And to diminiſh ſecretions morbidly augmented.—From the degree of effect they are capable of producing, they are fitted for thoſe caſes where conſiderable and permanent changes are neceſſary: They may alſo, however, be adapted to thoſe caſes where ſlight changes only are wanted.—The conſtitutions to which they are particularly fitted, are the irritable; and the delicate.

3. ADSTRINGENTIA INDURANTIA. The individuals belonging to this order are, from their nature, principally fitted for acting as aſtringents, by altering the ſtate of the containing veſſels: They are chiefly employed externally for producing a conſtriction of the orifices of ruptured veſſels.

From the degree of effect they are capable of producing, they are principally applicable in thoſe caſes where ſlight, ſudden, or tranſitory changes are required.—They are applicable with every conſtitution; but they do not ſeem to claim a preference to other aſtringents from any particular habit of body.

4. ADSTRINGENTIA TONICA. The individuals belonging to this order are, from their nature, calculated for thoſe indications to be anſwered by an action on the ſtate of the moving ſolids. They may be employed, with advantage, to diminiſh morbid irritability; and they are, in moſt caſes, preferable to other aſtringents for obviating original delicacy; and for reſtoring diminiſhed tonic power.—From the degree of effect they produce, they are fitted for thoſe ca-

ſes in which the higheſt, the moſt permanent, and the moſt gradual changes are requiſite.—The conſtitutions in which they are chiefly preferable to others, are young people; and thoſe of ſanguine temperaments.

CXLIII.

The cautions to be obſerved in the employment of aſtringents, as derived from their nature, chiefly reſpect the ſtimulant and cauſtic powers poſſeſſed by many individuals belonging to the claſs: The effects of an alteration produced in the ſolids if carried beyond the natural ſtate: And, in a particular manner, their influence as diminiſhing ſecretions; and as increaſing the power of the ſyſtem for the retention of excrementitious matters.—The conditions of the ſyſtem which chiefly require atten-

tion in their employment are, old age, melancholic habits, and particular morbid affections of the ſtomach.—The circumſtances chiefly to be attended to in the regimen neceſſary, reſpect: The avoiding a relaxing diet; And the keeping the patient in cool temperature and dry air.

CXLIV.

Aſtringents are chiefly contra-indicated by the preſence of the following morbid ſtates: A high degree of rigidity in the ſyſtem in general: Remarkable inſenſibility in the moving fibres: And particular diminution of the excretions from the body.

CHAP. XIX.

Of Emollients.

§ 1. *Of the Nature of Emollients.*

CXLV.

BY emollients are meant thoſe medicines which poſſeſs a power of relaxing the living animal fibre, without producing that effect from any mechanical action.

CXLVI.

From the employment of emollients the following direct effects are produced. They render the part to which they are immedi-

ately applied more ſoft and flexible than it was before. They excite a peculiar ſenſation indiſtinctly referred to the part to which they are applied. They produce, through the reſt of the ſyſtem, an effect in ſome degree analogous to that taking place in the part on which they more immediately act.

CXLVII.

The changes induced in the ſyſtem from the primary effects of emollients are: A diminution of the power of coheſion in various parts of the animal body: A diminution of tonic power in the ſyſtem: An increaſe of the capacity of containing veſſels in the part on which they more particularly act, and in ſome degree in the ſyſtem

in general: And an increaſe of irritability and ſenſibility through the ſyſtem.

CXLVIII.

The different articles referred to the claſs of emollients may be diſtributed into the following orders:

1. EMOLLIENTIA HUMECTANTIA; as examples of which may be mentioned, *Aqua tepida, Vapores tepidi.*

2. EMOLLIENTIA LAXANTIA.——*Althæa, Malva, Lilium Album.*

3. EMOLLIENTIA LUBRICANTIA.—*Olea blanda, Adeps, Axungia.*

4. EMOLLIENTIA ATONICA.—*Opium*, *Pediluvium*.

§ 2. *Of the Use of Emollients.*

CXLIX.

The indications of cure which the class of emollients can be employed to fulfil, may be derived from the two following sources:

1. From their producing a change in the state of the moving solids. Hence they may be employed,

a. To restore the natural flexibility to parts morbidly rigid.

b. To diminish a morbid increase of tonic power.

2. From their producing a change in the ſtate of the containing veſſels. Hence they may be employed,

a. To obviate the effects of morbid diſtention.

b. To remove obſtructions.

Theſe indications may be illuſtrated and confirmed, from practical obſervations concerning the effects of this claſs of medicines as employed in caſes of Contraction, Rigidity, and Tumor.

CL.

The principal circumſtances regulating the choice of orders in the claſs of emollients, may be deduced from the following obſervations concerning each:

1. EMOLLIENTIA HUMECTANTIA. The individuals referred to this order are, from their nature, fitted for fulfilling indications derived from both ſources. They are chiefly applicable for reſtoring the natural flexibility to parts morbidly rigid, and for removing obſtructions.—From the degree of effect they produce, they are chiefly adapted for thoſe caſes in which conſiderable and ſudden changes are requiſite.—The conſtitutions to which they are chiefly fitted, are robuſt habits; and thoſe in the prime of life.

2. EMOLLIENTIA LAXANTIA. The individuals referred to this order are, from their nature, principally adapted to thoſe caſes where a change is required in the ſtate of the containing veſſels; and are moſt generally employed, to obviate the ef-

fects of uncommon diſtenſion: And to remove obſtructions.—From the degree of effect they produce, they are fitted for inconſiderable, but ſlow changes.—They ſeem to be equally admiſſible with all conſtitutions, while, at the ſame time, they do not claim a preference to other emollients from any particular habit of body.

3. EMOLLIENTIA LUBRICANTIA. The individuals referred to this order are, from their nature, chiefly adapted to produce a change in the ſtate of the ſolids themſelves: They are principally ſuited to reſtore the natural flexibility to parts morbidly rigid.—From the degree of effect they produce, as well as the former order, they are fitted for conſiderable, but ſlow changes.——With regard to conſtitutions, the ſame ob-

ſervation will hold of this order, as was made of the laſt mentioned,

4. EMOLLIENTIA ATONICA. The individuals belonging to this order are, from their nature, fitted for fulfilling indications referred to both ſources. They are principally applicable for diminiſhing a morbid increaſe of tonic power, and for obviating the effects of morbid diſtenſion. —From the degree of effects they produce, they are preferable in thoſe caſes in which the moſt conſiderable and moſt ſudden changes are requiſite.—They are applicable with any conſtitution; and are particularly preferable with thoſe habits in which the effects of this claſs are required over the ſyſtem in general.

CLI.

The cautions to be obſerved in the employment of emollients, as derived from their nature, chiefly reſpect: Their influence as acting on the ſyſtem in general: And the effects of a degree of laxity induced in particular parts, higher than is natural to theſe.—The conditions of the ſyſtem which chiefly require attention in their employment are: The period of youth: Delicacy of habit: And debility.—The circumſtances chiefly to be attended to in the neceſſary regimen, reſpect: The temperature and air in which the patient is kept: And the mode of applying the emollient.

CLII.

The claſs of emollients are chiefly contra-indicated by the preſence of the following morbid ſtates: A high degree of morbid relaxation in the ſyſtem in general: And a peculiar ſenſibility of the moving fibres,

CHAP. XX.

Of Corrosives.

§ 1. *Of the Nature of Corrosives.*

CLIII.

BY corrosives are to be understood those substances which possess a power of destroying the texture of various solid parts of the animal body to which they are directly applied; while, at the same time, they produce this effect independently of any mechanical action.

CLIV.

From the employment of corroſives, the following direct effects are produced: They excite a ſenſation of pain referred to the part acted upon. They deſtroy the texture of the part to which they are immediately applied. They occaſion a ſeparation of the part deſtroyed, from that to which their influence does not extend. They lay open the extremities of the veſſels, disjoined from the parts deſtroyed.

CLV.

The changes induced in the ſyſtem from the primary effects of corroſives are: Inſenſibility in the part immediately acted upon: Diminution of the particular ſolids

to which they are applied: And the evacuation of pus from the veſſels whoſe extremities are laid open.

CLVI.

The different articles referred to the claſs of corroſives, may be divided into the two following orders:

1. CORROSIVA ERODENTIA; as examples of which may be mentioned, *Vitriolum coeruleum*, *Alumen uſtum*.

2. CORROSIVA CAUSTICA.—*Cauſticum Lunare*, *Oleum Vitrioli*.

§ 2. *Of the Use of Corrosives.*

CLVII.

The indications of cure which corrosives are capable of fulfilling may be derived from the three following sources:

1. From their producing a state of insensibility. Hence they may be employed,

a. To remove morbid sensibility in nerves to which they can be immediately applied.

b. To facilitate and render effectual openings into particular lodgements of matter.

2. From their producing a diminution

of ſolid parts. Hence they may be employed,

a. To remove morbid excreſcences.

b. To remove morbid indurations.

3. From their producing a diſcharge of pus. Hence they may be employed,

a. To facilitate the healing of old ulcers.

b. To facilitate the action of the *epiſpaſtica ſuppurantia*.

Theſe indications may be illuſtrated and confirmed, from practical obſervations concerning the effects of this claſs of medicines as employed in caſes of Toothach, Abſceſſes, Fungous excreſcences, and Callous-edged ulcers.

CLVIII.

The principal circumſtances regulating the choice of orders in the claſs of corroſives, may be deduced from the following obſervations concerning each;

1. CORROSIVA ERODENTIA. The individuals referred to this order are, from their nature, chiefly fitted for producing a deſtruction of ſolid parts, and may frequently be employed, with advantage, to remove morbid excreſcences or indurations. They are alſo, in ſome caſes, of ſervice, as producing a diſcharge of pus. And they may with ſucceſs be employed to facilitate the healing of old ulcers.—From the degree of effect they produce, they are applicable only where ſlight changes are wanted.

The conſtitutions to which they are principally adapted, in preference to the cauſtica, are, tender, delicate, and irritable habits.

2. Corrosiva Caustica. The individuals referred to this order are, from their nature, adapted for all the purpoſes to be anſwered by the claſs. They are, in general, to be preferred to the erodentia for removing morbid ſenſibility in the nerves to which they can be immediately applied. They are alone employed to facilitate openings into lodgements of matter, and to facilitate the action of the *epiſpaſtica ſuppurantia*.—— From the degree of effect they produce, they may be uſed where ſlight changes are wanted: And are alone applicable where the moſt conſiderable changes are required.—The conſtitutions to which they are

principally adapted, are, indolent and robuſt habits.

CLIX.

The cautions to be obſerved in the employment of corroſives, as derived from their nature, chiefly reſpect: The pain they excite: And the deſtruction of ſolids which they occaſion.—The conditions of the ſyſtem which chiefly require attention in their employment are: Childhood: Pregnancy: And a high degree of irritability.—The circumſtances chiefly to be attended to in regimen reſpect: The quantity of corroſive matter employed: The mode of application: The time for which the application is to be continued: And the poſition of the matter.

CLX.

Corrosives are chiefly contra-indicated by the presence of the following morbid states: Peculiar irritability: A high degree of putrid diathesis in the system: And a cancerous disposition.

CHAP. XXI.

OF DEMULCENTS.

§ 1. *Of the Nature of Demulcents.*

CLXI.

BY demulcents are to be underſtood thoſe medicines which poſſeſs a power of diminiſhing the effects of ſtimuli on the ſenſible ſolids of the body, without producing this effect in conſequence of any change in the ſtate of the nervous power.

CLXII.

From the employment of demulcents the following direct effects are produced. They lubricate and ſheathe thoſe parts to which they are topically applied. They enter the circulation, and exert the ſame effects at different excretories where they are afterwards collected. They diminiſh the activity of different ſtimuli with which they happen to be conjoined in the body.

CLXIII.

The changes induced in the ſyſtem, from the primary effects of demulcents are, : A diminution of the facility of action on ſenſible parts of the body : And a diminution of the force of the acting power by which theſe parts may be affected.

CLXIV.

The different articles referred to the claſs of demulcents may be diſtributed into the following orders;

1. DEMULCENTIA LENIENTIA; as examples of which may be mentioned, *Amylum, Gummi Arabicum, Oleum olivarum.*

2. DEMULCENTIA DILUENTIA.—*Aqua Aquoſa blanda.*

§ 2. *Of the Uſe of Demulcents.*

CLXV.

The indications of cure which demulcents are capable of fulfilling may be derived from the two following ſources:

1. From their action on the ſenſible ſolids. Hence they may be employed,

a. To diminiſh the action of ordinary ſtimuli upon parts affected with a morbid degree of ſenſibility.

b. To obviate a morbid deficiency in the natural coverings of parts.

c. To obviate the action of morbid ſtimuli.

2. From their action upon the ſtimulating fluids. Hence they may be employed,

a. To diminiſh morbid acrimony in the ſyſtem in general.

b. To render ſecretions, morbidly acrid, more mild.

☞ Theſe indications may be illuſtrated and confirmed, from practical obſervations con-

cerning the effects of this claſs of medicines as employed in caſes of Catarrh, Gonorrhœa, and Dyſentery.

CLXVI.

The principal circumſtances reſpecting the choice of orders in the claſs of demulcents, may be deduced from the following obſervations concerning each.

1. DEMULCENTIA LENIENTIA. The individuals referred to this order are, from their nature, in general preferable to the diluentia for acting on the ſenſible ſolids. They are alone uſed to obviate a morbid deficiency in the natural coverings of parts. They may alſo be employed for producing changes on ſtimulating fluids. And they are often of advantage for rendering ſe-

cretions, morbidly acrid, more mild.——From the degree of effect they produce, they may be of uſe where conſiderable changes are requiſite: But they are chiefly applicable where ſlight and ſudden changes are wanted.——The conſtitutions to which they are particularly adapted are, the irritable; and thoſe with a remarkable diſpoſition to have ſecretions morbidly augmented.

2. Demulcentia Diluentia. The individuals referred to this order, from their nature, are beſt fitted for thoſe indications which may be anſwered by an action on the ſtimulating fluids. And they are in moſt caſes preferable to the lenientia for diminiſhing morbid acrimony in the ſyſtem in general.——From the degree of effect they produce, they can

be employed only for slight changes.—The constitutions in which they are chiefly preferable to the lenientia are, habits naturally torpid; and those with a remarkable disposition to have secretions morbidly diminished.

CLXVII.

The cautions to be observed in the employment of demulcents, as derived from their nature, chiefly respect: The effects of diminished excretion: And the diminution of the action of ordinary stimuli.—The conditions of the system chiefly requiring attention in their employment, are: Habits naturally insensible: And those in which there occur peculiar morbid states in the secretions.—The circumstances chiefly to be regarded in the regi-

men neceſſary, reſpect: The mode of exhibiting the medicines: And the avoiding ſtimulating or acrid diet.

CLXVIII.

The individuals referred to the claſs of demulcents are chiefly contra-indicated by the preſence of the following morbid ſtates: A praeternatural deficiency of acrimony in the ſecreted fluids: A high degree of morbid viſcidity in the coverings of ſenſible parts: And uncommon want of ſenſibility in the excretory organs.

CHAP. XXII.

Of Stimulants.

§ 1. *Of the Nature of Stimulants.*

CLXIX.

BY ſtimulants are to be underſtood thoſe medicines which poſſeſs a power of exciting the animal energy; and which, at the ſame time, can produce this effect without endangering the deſtruction of life.

CLXX.

From the employment of ſtimulants the following direct effects are produced. They

occaſion a particular ſenſation referred to the part more immediately acted upon; frequently a ſenſe of pain. They increaſe the action of muſcular fibres in that part, particularly in its veſſels. They increaſe the energy of the ſenſorium. They increaſe the nervous energy in the moving fibres through the ſyſtem in general.

CLXXI.

The changes induced in the ſyſtem from the primary effects of ſtimulants are: Acceleration of the motion of the blood in the part to which they are particularly applied: An increaſe of the force of circulation in the ſyſtem in general: An increaſe of excitement in the powers of ſenſation: And an augmentation of mobility and vi-

gour in the muſcular fibres through the ſyſtem in general.

CLXXII.

The different articles referred to the claſs of ſtimulants, may be diſtributed into the following orders:

1. STIMULANTIA TOPICA; as examples of which may be mentioned, *Sinapi*, *Cantharides*, *Mercurii praeparationes*.

2. STIMULANTIA DIFFUSIBILIA.—*Alcali volatile*, *Electricitas*, *Calor*.

3. STIMULANTIA CARDIACA.—*Cinnamomum*, *Nux Moſchata*, *Vinum*.

§ 2. *Of the Use of Stimulants.*

CLXXIII.

The indications of cure which ſtimulants are capable of fulfilling may be derived from the three following ſources:

1. From their affecting the ſtate of circulation. Hence they may be employed,

a. To facilitate the paſſage of blood through parts in which it is morbidly obſtructed.

b. To augment the force and celerity of the circulation where it is morbidly ſlow and weak.

2. From their acting on the powers of ſenſation. Hence they may be employed,

a. To quicken the ſenſes where morbidly dull.

b. To rouze the mental faculties when in a lethargic ſtate.

c. To exhilarate a deſpondent condition.

3. From their acting on the moving fibres. Hence they may be employed,

a. To reſtore the power of motion where morbidly deficient.

b. To increaſe the ſtrength of motion where morbidly weak.

Theſe indications may be illuſtrated and confirmed from practical obſervations concerning the effects of this claſs of medi-

cines as employed in cases of Syncope, Apoplexy, and Palsy.

CLXXIV.

The principal circumstances regulating the choice of orders in the class of stimulants, may be deduced from the following observations concerning each:

1. STIMULANTIA TOPICA. The individuals referred to this order, from their nature, are, in some measure, fitted for indications reduced to all the sources. As affecting the circulation, they are chiefly useful to facilitate the motion of the blood through parts in which it is morbidly obstructed. As affecting the powers of sensation, they may be usefully employed to

quicken the ſenſes, or to rouze the mental faculties. And, as acting on the moving fibres, they are chiefly of ſervice to reſtore the power of motion where morbidly deficient.—From the degree of effect they produce, they are fitted for caſes where theſe changes are requiſite to a conſiderable extent; and likewiſe where they are ſuddenly wanted.——The conſtitutions to which they are principally adapted, are, the Vigorous: Thoſe of conſiderable ſenſibility: And thoſe in whom effects are chiefly requiſite at any particular part to which they can be immediately applied.

2. STIMULANTIA DIFFUSIBILIA. The individuals belonging to this order, as well as the former, may likewiſe, from their nature, be employed for anſwering indications referable to all the ſources: As af-

fecting the circulation, they are chiefly uſeful to augment its force where morbidly weak. As acting on the power of ſenſation, they may be employed to quicken the ſenſes, and to rouze the mental faculties when in a lethargic ſtate. As affecting the moving fibres, they may be uſed both to reſtore and ſtrengthen motions.—From the degree of effect they produce, they are applicable where the higheſt and moſt ſudden changes are requiſite; but they can ſeldom be truſted for producing permanent changes.—The conſtitutions to which they are chiefly applicable are: The torpid: And thoſe with whom effects are principally requiſite over the whole ſyſtem.

3. STIMULANTIA CARDIACA. The individuals reduced to this order are, from their nature, chiefly uſeful as affecting the

powers of ſenſation; they are particularly preferable to others for exhilarating a deſpondent condition. As affecting the circulation, they are often applicable for augmenting its force when morbidly weak.—From the degree of effect they are capable of producing, they may be adapted both for ſlight and conſiderable changes.—The conſtitutions in which they are chiefly of uſe, are: Debilitated habits: And thoſe of a melancholic temperament.

CLXXV.

The cautions to be obſerved in the employment of ſtimulants, as derived from their nature, chiefly reſpect: The pain they excite: The violence of circulation which they occaſion: The flow of ſpirits they produce: The mobility of the ſyſtem

which ariſes from their employment: And the collapſe, which is the conſequence of high and ſudden excitement.—The conditions of the ſyſtem which chiefly require attention in their employment, are delicate and irritable habits.—The circumſtances chiefly to be attended to, in the regimen neceſſary, reſpect: The diet and temperature beſt adapted to the ſtimulant employed: And the nature of the particular diſeaſe in which it is uſed.

CLXXVI.

The individuals belonging to this claſs are chiefly contra-indicated by the preſence of the following morbid ſtates: A high degree of morbid irritability: The circulation uncommonly accelerated: And a praeternatural diſpoſition to Haemorrhagy.

CHAP. XXIII.

OF SEDATIVES.

§ 1. *Of the Nature of Sedatives.*

CLXXVII.

BY ſedatives are to be underſtood thoſe medicines, which poſſeſs a power of diminiſhing the animal energy, and are, at the ſame time, capable of producing this effect without the deſtruction of life.

CLXXVIII.

From the uſe of ſedatives, the following direct effects are produced. They diminiſh

the ſenſibility of the part to which they are particularly applied. They diminiſh the action and tonic power of its muſcular fibres. They produce a peculiar ſenſation in the ſyſtem in general. They diminiſh the energy of the ſenſorium.

CLXXIX.

The changes induced in the ſyſtem, from the primary effects of ſedatives, are; Retardation of the blood's motion in the part more immediately acted upon: Diminution of the force of circulation in the ſyſtem in general: Diminution of excitement in the powers of ſenſation and reflexion: And diminution of vigour in muſcular action through the ſyſtem.

CLXXX.

The different articles referred to the class of sedatives may be distributed into the following orders:

1. SEDATIVA SOPORIFICA; as examples of which may be mentioned, *Papaver*, *Hyosciamus*, *Opium*.

2. SEDATIVA REFRIGERANTIA.—*Sales Neutri*, *Acidi*.

§ 2. *Of the Use of Sedatives.*

CLXXXI.

The indications of cure which sedatives are capable of fulfilling may be derived from the following sources:

1. From their affecting the circulation. Hence they may be employed,

a. To diminiſh the force and celerity of the blood's motion where morbidly augmented.

b. To diminiſh the impetus of the blood againſt parts morbidly affected.

2. From their acting on the powers of ſenſation. Hence they may be employed,

a. To abate violent pain.

b. To procure ſleep, in caſes of praeternatural watchfulneſs.

3. And from their acting on the moving fibres. Hence they may be employed,

a. To reſtrain inordinate motions.

b. And to moderate exceſſive evacuations.

These indications may be illustrated and confirmed from practical observations concerning the effects of this class of medicines, as employed in cases of Inflammation, Tooth-ach, and Dysentery.

CLXXXII.

The principal circumstances regulating the choice of orders in the class of sedatives, may be deduced from the following observations concerning each:

1. SEDATIVA SOPORIFICA. The individuals referred to this order are, from their nature, principally adapted for those indications to be answered by affecting the powers of sensation, and by acting upon the

moving fibres.—From the degree of effect they produce, they may be employed where the most considerable changes are wanted.—The constitutions to which they are best adapted, are the robust and vigorous.

2. SEDATIVA REFRIGERANTIA. The individuals belonging to this order, from their nature, are chiefly useful as affecting the circulation.—From the degree of effect they produce, they are fitted for inconsiderable changes only.—The constitutions to which they are principally adapted are, the sanguine and plethoric.

CLXXXIII.

The cautions to be observed in the employment of this class of medicines, as de-

rived from their nature, chiefly reſpect: The inſenſibility which they produce: The atonia they occaſion in the muſcular fibres, particularly in the blood-veſſels: And the ſuſpenſion of the powers of ſenſation with which they are ſometimes followed.—The conditions of the ſyſtem which chiefly require attention in their employment are: Irritable and relaxed habits: And thoſe who are conſtitutionally liable to delirium from their uſe.——The circumſtances chiefly to be attended to, in the neceſſary regimen, reſpect: The regulation of the doſe of the medicine employed: The avoiding all ſtimulating cauſes during their operation: And the guarding againſt their becoming habitual to the ſyſtem.

CLXXXIV.

Sedative medicines are chiefly contra-indicated by the preſence of the following morbid ſtates: The circulation praeternaturally languid: A remarkably lethargic diſpoſition: And a high degree of morbid torpor in the ſyſtem.

CHAP. XXIV.

OF ANTISPASMODICS.

§ 1. *Of the Nature of Antiſpaſmodics.*

CLXXXV.

BY antiſpaſmodics are meant thoſe medicines which poſſeſs a power of allaying inordinate motions in the ſyſtem, particularly thoſe involuntary contractions which take place in muſcles naturally ſubject to the command of the will.

CLXXXVI.

From the employment of antiſpaſmodics the following direct effects are produced :

They counter-act and remove various cauſes exciting contractions : They diminiſh the influence of the nervous energy in the parts ſpaſmodically affected.

CLXXXVII.

The changes induced in the ſyſtem, from the primary effects of antiſpaſmodics, are ; The reſtoration of the proper balance of the nervous energy in different parts of the body: The reſtoration of the due influence of the will ; And the reſtoration of the natural ſtate of tenſion to the muſcles.

CLXXXVIII.

The different articles referred to the claſs of antiſpaſmodics may be diſtributed into the two following orders :

1. ANTISPASMODICA STIMULANTIA; as examples of which may be mentioned, *Alkali volatile*, *Olea eſſentialia*, *Liquor aethereus*.

2. ANTISPASMODICA SEDATIVA—*Camphora*, *Moſchus*, *Opium*.

§ 2. *Of the Uſe of Antiſpaſmodics.*

CLXXXIX.

As the action of the medicines referred to this claſs depends entirely upon the preſence of a morbid ſtate, what has been advanced with regard to their nature, will, in a good meaſure, ſerve to illuſtrate their uſe.—The indications of cure, which, as antiſpaſmodics, they are capable of fulfilling, are entirely

to be derived from their influence on the nervous energy. Hence they may be uſed,

a. To remove ſpaſmodic contractions taking place in different muſcles.

b. To allay convulſive agitations.

Theſe indications may be illuſtrated and confirmed from practical obſervations concerning the effects of antiſpaſmodics as employed in caſes of Epilepſy and Cramp.

CXC.

The principal circumſtances regulating the choice of orders in this claſs of medicines, may be deduced from the following obſervations concerning each;

1. ANTISPASMODICA STIMULANTIA; The individuals referred to this order are,

from their nature, preferable in thoſe caſes where, with an antiſpaſmodic effect, it is neceſſary to conjoin that of a ſtimulus to the ſyſtem.—From the degree of effect they produce, they are chiefly uſeful where inconſiderable changes are requiſite; but, at the ſame time, they are beſt adapted to thoſe caſes in which ſudden changes are neceſſary.——The conſtitutions to which they are principally adapted are: The melancholic: And thoſe of torpid habits.

2. ANTISPASMODICA SEDATIVA. The individuals referred to this order are, from their nature, preferable in thoſe caſes where, with an antiſpaſmodic effect, it is neceſſary to conjoin a diminution of the nervous energy through the ſyſtem in geral.—From the degree in which they ope-

rate, they may be uſed where the higheſt changes are requiſite.—The conſtitutions in which they are chiefly preferable to the preceeding order, are, the ſanguine; and thoſe of irritable habits.

CXCI.

The circumſtances claiming attention in the employment of antiſpaſmodics, which reſpect either the nature of the medicine itſelf, the condition of the patient in whom it is uſed, or the neceſſary regimen, are different according to the particular order which is employed. They will eaſily be underſtood from what has already been ſaid of ſtimulants and ſedatives conſidered as ſeparate claſſes.

CXCII.

There is, perhaps, no condition of the body which will contra-indicate the uſe of every individual referred to the claſs of antiſpaſmodics. But the ſame morbid conditions, which have already been mentioned, as contra-indicating the uſe of ſtimulants and ſedatives, will likewiſe contra-indicate the orders of antiſpaſmodics denominated from theſe claſſes.

The END.

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